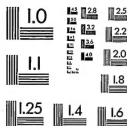




MICROCOPY RESOLUTION TEST CHART  
(ANSI and ISO TEST CHART No. 2)



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14:1

# Thomas A Edison Papers

*A SELECTIVE MICROFILM EDITION*

*PART IV  
(1899-1910)*

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Lisa Gitelman  
Gregory Jankunis  
David W. Hutchings  
Leslie Fields

Theresa M. Collins  
Gregory Field  
Aldo E. Salerno  
Karen A. Detig  
Lorie Stock

Editors

Robert Rosenberg  
Director and Editor

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**START**

**206**

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**Edison Portland Cement Company Records  
Plant Operations - Trouble Inquiry (1903)**

This folder covers the period October-December 1903 and consists of a series of preprinted forms with the title "Trouble Inquiry." Each form contains typewritten questions, suggestions, or criticisms by Edison concerning operations at the Stewartsville works, along with responses and comments by other company employees. The documents are all initialed by Edison and some bear his handwritten notations.

Approximately 50 percent of the documents have been selected.

NOV - 4 1903

OCT 24 1903

Number 3

## TROUBLE INQUIRY.

Edison Portland Cement Company.

*Orange Office*Orange, N. J., Oct. 19th, 1903.Mr. E. S. Moulton, Manager.On Log Report of Oct. 14th, 1903.Item 2.54 P.M. Department Chalk PlantHow long will it be before wiring on Blower motors will be changed and Portable starting box provided?Please return this report when the work is done & in use.*OK W. H. G.*

THOMAS A. EDISON, General Manager.

Referred to Mr. Goodwillie <sup>10/16/03</sup> for explanation.The plugs and receptacles are being put in now and the wiring changed.The D.P. and S.P. switches were ordered on the 13<sup>th</sup> inst but have not as yet arrived. It will take a day after arrival of switches to complete the work.*W. H. G.**finished 10/31/03**OK*New Village, N. J., 10/22 1903*R. H. Goodwillie*OCT 28 1903  
OCT 20 1903

*Orange Office*  
*10/14/03*

10-21-03

001 232 #

Number 4

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 19, 1903.

Mr. H. S. Moulton Manager.

On Log Report of Oct. 18th, 1903.

Item 7 A.M. Department ✓ Clinker Fine Grinder

① Why was blower chutes cleaned on in Mill time with a loss of 35 minutes?

② How about shaking these baffle plates regularly & means to get to them with a portable ladder? answered, the original idea was to clean often

*THW*

THOMAS A. EDISON, General Manager.

Referred to Mr. *Chinn* 10/21/03 for explanation.

① Baffle Plates Where Closed and Cement Lodged around Fan there is no Walk up to get to Ladder to Make Baffle Plates

② I have made arrangements to have them channel - will use ladders from present 10-29-03 *CHINN*

New Village, N. J., *Oct 21st*, 1903

*John O'Brien*  
*Asst. H.S. Moulton.*

OCT 28 1903  
OCT 20 1903

*Orange Office*

OCT 20 1903

Number 6

# TROUBLE INQUIRY. Edison Portland Cement Company.

Orange, N. J., Oct. 19, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 14,

Item 3.40 P.M. Department Clinker Fine Grinder

Why did belt slip on log conveyor? Could this not have  
been foreseen? Ninety minutes is rather slow for giving this belt  
and how much more time was lost cannot be told by the log. You  
stopped at 3.40 and Mill was shut down for the day. Please explain  
this.

Why did the conveyor belt slip, and if this  
could have been foreseen.

*OK*

THOMAS A. EDISON, General Manager.

Referred to Mr. O'Brien 10/21/03, for explanation.

Belt at #153 was slipped. Belt on Drive of #1 grinder  
slipped. Belt Man did not get belt's house  
as far as could pass.

Will Men Cleaning up Mill

New Village, N. J., 10-21-03 190

*O'Brien*  
*Per W.H.K.*

OCT 31 1903

OCT 22 1903

Orange Office  
H.S.M. 10/2/03

Number 14

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 19, 1903.

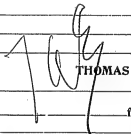
Mr. H. S. Moulton, Manager.

On Inspector's Report of Oct. 16,

Item 2108 Department Inspection

Are flight bolts burred over?

(2) Would not a little burring keep the nut from being lost & yet permit setting up nut



THOMAS A. EDISON, General Manager.

Referred to Mr. for explanation.

Ans. - Tight & clamp bolts are not needed on any where. In fact it is frequently necessary to set up bolts with. as the rope becomes smaller on wearing.

(2) I think we will try cutting punching bolts on threads thus (this with answer the purpose) 10-29-03

New Village, N. J., Oct. 20th, 1903.

L. H. Moulton.

OCT 28 1903  
OCT 20 1903

*Orange Office*

OCT 23 1903

Number 24

# TROUBLE INQUIRY.

Edison Portland Cement Company

Orange, N. J.,

Oct. 21, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 21, 19

Item 8.40 A.M. Department Clinker Fine Grinder.

Was it a new cable that broke and one with a proper splice?  
How many hours did it run? Is the actual grinding time of cables

(1) being recorded so we can learn something from any changes we may make?

(2) *Mason. What is the reason that this rope lasted only 20 hours, what is the life of other ropes, please keep a record of crushing hours of each rope. This will not do as a regular thing -*

THOMAS A. EDISON, General Manager.

Referred to Mr. *O'Brien* 10/23/03 for explanation.

(1) *The Cable Was Properly Spliced The Actual grinding time was 20.7 hours*

(2) *We can always get the grinding time of a rope by the log as all changes of ropes are noted on log. I cannot explain this cause the rope broke in the splice. The one on now has been running about 10 days.*

*10-29-03 W.H. Ham*

New Village, N. J., Oct 26

190

OCT 22 1903

*J. M. Davis*

Orange Office

101 81 403

101 27 903

Number 26.

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 21, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 17.

Item 7.24 A.M. Department Chalk Plant

① Was the cable taken off a new one with good splice? How long has it run actual crushing time in hours?

② Keep a record history of each rope on chalk & cement - WE cant do this

*W. M.*

THOMAS A. EDISON, General Manager.

Referred to Mr. *Pingree* 10/21/03 for explanation.

① The cable referred to was a new one - with long splice - Having two splices by *Mat Stuckner* & *H. H. H. H.*  
The actual crushing time in hours, taken from Log Book, was 29.7 hrs.

② *I think this was spliced by Dan Smith, anyway it was not spliced by Stuckner*  
*noted - see answer made to query 2 - Shd by W. M.*

New Village, N. J., Oct. 24 1903

*Pingree*

OCT 29 1903  
OCT 22 1903

OCT 24 1903

Number 28.

## TROUBLE INQUIRY.

OCT 20 1903

Edison Portland Cement Company.

Orange Office

Orange, N. J., Oct. 21, 1903.

Mr. H. S. Moulton, Manager.

On Inspector's Report of Oct. 17th,

Item 2121 Department Inspection

Why do fields and armatures get dirty? Why not find the leaks?

Were Barnes men to have bellows & keep  
these fields clean during inspection  
that was my understanding - Are they provided  
with bellows or equivalent if done every day there  
would be no trouble.

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes 10/22/03 for explanation.

The cause of armature & fields getting  
dirty is due to the revolving armatures  
gathering the fine float dust from the air  
that comes through the grating and in  
the door when opened and not from  
dust leaks as supposed

10/24/03  
2nd answer

The Grating Cleaners and  
Inspectors are supplied with bellows & are

New Village, N. J., Oct 22

1903

Arthur I. Barnes

OCT 28 1903

OCT 22 1903



[ON BACK OF PRECEDING PAGE]

and take advantage of any shot down to clean  
up. Master thoroughly.

extra

TROUBLE INQUIRY.

Department  
Part  
Nature of Trouble

~~The cause of the trouble is the fact that the  
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Oct 22  
C. W. B. B. B.

Orange Office

NOV - 3 1903

OCT 22 1903

Number 30.

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 21, 1903.

Mr. H.S. Moulton, Manager.  
On Inspector's Report of Oct. 17,  
Item 2123 Department Inspection

If this moves you will have trouble with shear devices and shaft bearings. Can you fix it?

(2) Please report what you decide about 2123 —

THOMAS A. EDISON, General Manager.

Referred to Mr. Bitts, 10/23/03 for explanation.

This can be fixed by Renewing the keys which are supposed to secure bearing in place. This would be quite a long job. Can be made secure with top Bolts to girders

we will try inserting keys

2 - over

New Village, N. J., Oct 23 1903

OCT 22 1903

Ans Bitts

[ON BACK OF PRECEDING PAGE]

it was found on ex amination that the  
spacing block on this side had moved somewhat  
as it was not very tight, this was set forward  
& extra Shimms put on top of yellow block  
so top cypher would clamp it. seems to be  
all right now.

W.H.M.  
11-4-03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

OCT 26 1903

Number 31

*Change Office*

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 21, 1903.

Mr. H.S. Moulton, Manager.

On Inspector's Report of Oct. 18.

Item 2126 Department Inspection

*Could fine grinding better*  
So all of the Rolls both Chalk and Cement get hot? Did they formerly get hot?

*Ropes & chains  
get hot*

*WRM*

THOMAS A. EDISON, General Manager.

Referred to Mr. Joyner 10/23/03. for explanation.

*All of the ropes get hot when strands are  
not properly laid in and ropes are dry.*

*Did not notice ropes getting hot in former  
runs.*

*Are on drying ropes now  
correct*

New Village, N. J., 10/24 1903

*W. D. Joyner*

OCT 22 1903

*Orange Office*

661 26 903  
Number 32.

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 21, 1903.

Mr. H. S. Moulton, Manager.  
On Inspector's Report of Oct. 18,  
Item 2128 Department Inspection  
I think Dope with graphite will help very much; an experiment  
on 2 or 3 pair of wheels is better than theory.

*Roasters  
oil system*

*OK*

THOMAS A. EDISON, General Manager.

Referred to Mr. *Radner* - 10/22/03 for explanation.

*Have used graphite mixed with  
a little oil, looks very favorable,*

*If we can keep a coating of graphite  
on rollers which, that will prevent  
waster from rolling on bare metal  
it will certainly preserve both.*

New Village, N. J., 10/24 1903

OCT 22 1903

*certified*

*M. Radner*

*Orange Office*

Number 37

## TROUBLE INQUIRY.

*OCT 30 1903*

Edison Portland Cement Company.

Orange, N. J., Oct. 26, 1903.

Mr. E. S. Moulton, Manager.

On Inspector's Report of October 23rd,

Item 2192 Department

A number of good bolts in scrap pile to the left of Machine Shop.  
Dilts, have some one attend to picking up bolts, etc. around Mill.

Think Rigger could do it.

Suggest a helper or yard man be provided with a basket  
and a barrel and told to go all over the plant inside and out and  
pick up all small things, empty in barrel and when full it is to be  
taken to storeroom and good bolts etc. sorted out. You will  
probably collect one ton.

*W. A. Ed.*  
THOMAS A. EDISON, General Manager.

Referred to Mr. \_\_\_\_\_ for explanation.

*This has been done frequently  
by one of riggers helped by one long  
collector General time. Don't  
think it would pay to keep man at  
it all the time. but will have it  
done every now & then*

New Village, N. J.,

10-28

1903

*W. A. Ed.*

*OCT 28 1903*

*Copy office*

NOV - 5 1903

NOV - 13 1903

Number 38

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 26, 1903.

Mr. H. S. Moulton Manager.

On Inspector's Report of Oct. 23.

Item 2196 Department

Flights on Conveyor #118 catch on chute at rear end.

Will look into it.

1 - Report what is done to stop this.

2 - *Worn - would churning flanges on wheels help what?*

THOMAS A. EDISON, General Manager.

Referred to Mr. *Deayne* for explanation.

*New struts have been put on which guides conveyor straight and does not allow flights catch on chute at rear end. The old struts were badly worn on thrust call on.*

(2) *This is not due to flanges wearing but to the old nature of thrust bearings in scraper con. wheels. We are gradually replacing all scrapers with wheels that have larger thrust bearing.*

*W. H. - 11-25-03.*

New Village, N. J., 10/31 1903

NOV 3 - 1903  
OCT 28 1903

*M. A. Deayne*

Orange Office.

NOV - 5 1903

189-23 1903

Number 39

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 26, 1903.

Mr. H. S. Moulton, Manager.

On Inspector's Report of Oct. 23,

Item 2197 Department

Several flat wheels on Conveyor #118. Cary, why have these

not been changed? (2nd notice)

Why was this not attended to?

2 (Mason - How about getting Chief of flanges  
& tread to wheels - )

THOMAS A. EDISON, General Manager.

Referred to Mr. Cary, & others for explanation

We could not get off wheels from  
machine & had to replace old ones.

1 These wheels could not be kept because with the thickness of men-  
at that time we could not find the diamond and sooner or later the  
mill going at other points so as this could not be delayed in  
favor of other places which could not be neglected. A. B. Bell

2 (The Chief of flanges would be O.K. but we have so many others  
wheels on hand that I think it cheaper to run them up. When we get  
them it should be changed. Office 11-5-03.

New Village, N. J., 10-28-1903

NOV 3 - 1903  
OCT 28 1903

Thomas (Cary)



Orange Office

NOV - 2 1903

Number 41

## TROUBLE INQUIRY.

NOV 16 1903

### Edison Portland Cement Company.

Orange, N. J., Oct. 26, 1903.

Mr. H. S. Moulton, Manager.

On Inspector's Report of Oct. 22,

Item 2188 Department

Inside temperature of Gummy chamber over 60 H.P. motor driving Conveyor 132, after running 9 hours 20 minutes, 115 deg. F. outside 74 deg. F. Barnes report to me.

1 ( Either the fan is too slow or this chamber never was made large enough. Please report what is to be done about it.

2 ( Barnes Please report temperature when new fan is in

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes for explanation.

1 ( The fan in this chamber was not at home had it fixed. Gummy area 328 sq ft we are putting in extra fan paper as in other chambers of 50 house notes # 109 & 100

2 ( Temptin with #2 fan blowing in outside air through musher bag P. A. m. 60° 11 A. 80° 3 P. M. #2 temptin outside in open air 92

New Village, N. J.,

1903

Oct 31st

W. Barnes

NOV 3 - 1903  
OCT 28 1903

W. Barnes  
11-15-03

Orange Office

NOV 14 1903

1000

Number 43

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 26, 1903.

Mr. H. S. Moulton, Manager.  
On Inspector's Report of Oct. 22,  
Item 2189 Department  
Fields of motor driving Roaster No. 2 are very hot,  
brushes sparking badly. Motor has been changed.

Why did fields get hot and brushes spark?

2 This explanation is all wind to me go ahead & explain why fields of motor got hot - don't want to waste through a lot of back research

THOMAS A. EDISON, General Manager.

Referred to Mr. Goodwin for explanation. 2 - Goodwin

This is inspectors report of trouble with motor which appears on log Roaster plant Oct. 21 - 418. Cause is explained in sheet for that item See item #72

There was high bar in commutator which caused sparking and heating. As commutator could not be brought down to good surface had to change motors - see item #78

New Village, N. J., 10/29 1903

NOV 3 - 1903  
OCT 28 1903

Goodwin  
11-1-03

R.H. Goodwin

*Change  
Office*

10-31-1903

Number 44

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 26, 1903.

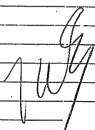
Mr. H. S. Moulton, Manager.

On Inspector's Report of Oct. 21,

Item 2159 Department

Commutator bearing of front equalizer runs hot. Cary,  
put flexible coupling on like flexible on skip car dump.

What is equalizer?



THOMAS A. EDISON, General Manager.

Referred to Mr. *Govarditch* 10/26 for explanation.

*Equalizers are used so that the 250 volt power  
generators can be used for lighting.  
They are two 25 HP motors coupled together.  
They equalize the voltage at the lamps  
when there is a difference in loads  
between the two sides of the three wire  
system.*

*This enables us to shut down the small  
A & D engines and run only larger ones.*

New Village, N. J., 10/29 1903

*W. H. L.*

*B. B. Govarditch*

*Orange Office*

Number 46

## TROUBLE INQUIRY.

701 30 1903

Edison Portland Cement Company.

Orange, N. J., Oct. 26, 1903.

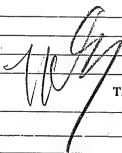
Mr. H. S. Moulton, Manager.

On Inspector's Report of Oct. 21,

Item 2169 Department ✓

Pieces of iron are breaking out of flange of 2nd shell from  
rear end of Roaster. Noted.

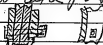
What is cause? Is it serious- will dope and graphite help out?



THOMAS A. EDISON, General Manager.

Referred to Mr. \_\_\_\_\_ for explanation.

*Apparently caused by spongy casting. The soft part gives way + causes the solid part to fail or separate under pressure. It has become very bad. Saw one within the last two or three days and we are fitting castings on out side of flanges to both part of the pressure. as per sketch*



*2nd Roaster flange*

New Village, N. J.,

10-28

1903

*W. A. Edison*

Orange office

NOV - 43 1903

Number 56

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Oct. 20,

Item 2142 Department Oil cups come off of one wheel on Conveyor 114. Cary.

1) Why do they come off? Why don't the foreman find these things out?

2) What is proposed for remedy?

THOMAS A. EDISON, General Manager.

Referred to Mr. Pingree for explanation.

1) The small cotter in screw head wears off. Small screw is not long enough, should be 3" long, so that end of screw will go at least 2" into hole in wheel. As the rainbirds washer shrinks it allows cap to work until point of screw is worn away - Then cap easily unscrews. These caps were found off by foreman and same reported to foreman of Oil Dept.

(2) None  
New Village, N. J., Oct. 30 1903

Thomas is pretty tight but there are other reasons - see inspection report of 10-28-03

Pingree

NOV 3 - 1903

W. H. H.

[ON BACK OF PRECEDING PAGE]

(2) as was afterwards discovered there was an obstruction in the dust bin which would hit the plugs on oil cups. Sometimes + break saw mentioned in Purvis report. The oil now feeds washers. Skunk in some cases + little cup get broken there as it moves it wears out the fastening.

These scraper con. wheels are very unsatisfactory any way. They have to be oiled very frequently and it takes a lot of time to keep them in shape, although there is not much time charged against them in the log reports. All of the scraper con. were gone over + oiled last week and now there are <sup>some</sup> wheels squeaking on almost all of them. Of course part of this trouble is due to the thin bearings within but that is not all of it. I am sure we could get up some thing better.

W. H. M.  
11-4-23

# TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange Office

NOV-6 303

File - 12 58  
Number 58

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H.S. Moulton, Manager.  
On 2144 Inspectors Report of Oct. 20,  
Item 2144 ✓ Department  
One chill shoe broken on front side of Conveyor 128. Cary

Why didn't foreman find this out?  
There is no proof - but how can I know that  
✓ you knew of the fact?

THOMAS A. EDISON, General Manager.

Referred to Mr. Rader for explanation.

- 1 - What proof is there that he did not know it?  
There were 8 or 9 broken and were once put since con, is missing and place and this was replaced the same day.
- 2 - He claims that he did know of the broken chill shoe. 10/31 1903 H.H. 11/9/03

OCT 28 1903 express -

NOV 11 1903

Orange office

NOV - 5 1903

14, - 13 100

Number 59

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H.S. Moulton, Manager.  
On Inspectors Report of Oct. 20,  
Item 2145 Department One bolt out of two clamps on Conveyor 128. Cary.

Why didn't foreman find this out? Foremen are paid to find these things out and not depend on the inspector. If they are permitted to rely on him to find everything, things will go bad.

*Masson - What can be done to stop this trouble -*

THOMAS A. EDISON, General Manager.

Referred to Mr. Radley for explanation.

*He did find it out. The man in charge reports them to foreman soon after he finds them.*

*At the present time while I am writing this report the man in charge reports to me at 5:50 A.M. that (6) six come out since 9:30 P.M. so you see it is very trouble some, to keep them all in all the time.*

2 - New Village, N. J.,

10/31 1903

OCT 28 1903

CONTR -

*M. Radley*

NOV 3 - 1903



[ON BACK OF PRECEDING PAGE]

I am going to have all these strands marshaled under  
a single punch. This will prevent miscounting  
of B. but it will be possible to take this off when  
necessary. If bolts become a little loose clamped  
with slip it will be useless. I do not think it  
advisable to run our boats for it would be  
an endless job to take care apart from new  
rope.

W. H. H. 11-3-03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

*Orange Office.*

Number 80

## TROUBLE INQUIRY.

*CC1 80 1003*

### Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H.S. Moulton, Manager.

On 2146 Inspectors Report of Oct. 20,

Item 2146 Department

Will not patterns at front end of roaster No. 1, become  
warped, they are piled up in a very reckless manner. This is only  
temporary; think they are O.K.

Warped patterns are expensive.

  
THOMAS A. EDISON, General Manager.

Referred to Mr.  for explanation.

*I realize this, do not  
think thing as unusual*

New Village, N. J., 10-28 1903

*W. H. Mary*

OCT 28 1903

*Orange  
Office*

001 241 1

Number 61

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., 10/27/03/

Mr. H. S. Moulton, Manager.

On Inspectors Report of Oct. 20,

Item 2147 Department One flight off of conveyor 128. Cary.

Why didn't foreman report this, he has men under him to watch the machinery; they are probably not told to look out for these things and report to him.

Mr. Moulton- please take this up and arrange that men report these things to foreman, also that foreman's duties are of an inspection nature. He is there to look ahead and find and have fixed the things which the General Inspector now finds for him.

I notice continuously that if a bearing needs canvassing, on Kiln, its always the Inspectors who call attention to it, whereas the foreman of the plant should attend to it. There seems to be a general misapprehension as to what the foreman of the plant is for and the Inspector's duties. The latter is generally speaking, to check the foreman and not primarily to find the troubles.

THOMAS A. EDISON, General Manager.

Referred to Mr. *W. H. Moulton* for explanation.

*The Foreman have been advised of the above, and we hope to have better results hereafter. However, you must remember that many of these cars are reported to the proper people & repaired & you never hear of it. There are other cars which are reported but not repaired before inspection sustains them.*

New Village, N. J., 10-29 1903

*W. H. Moulton*  
OCT 28 1903 *Mr. Moulton* This matter was taken up with the Foreman at our afternoon's meeting as day or two ago. *M. H. Moulton* 10/30/03.

*Orange  
Office*

Oct 13 1903

Number 67

# TROUBLE INQUIRY.

Edison Portland Cement Company

NOV - 9 1903  
NOV 16 1903

Mr. H.S. Moulton, Orange, N. J., Oct. 27, 1903.  
Manager.  
On Log Report of Oct. 23,  
Item 4-35 P.M. Department Roaster Plant #1.  
Shut down on account of putting new brushes on Roaster Motor.

Why were new brushes put on roaster motor of No. 1?

*Barrie -*  
*In our tests if you will remember, the Commutator*  
*got sparking & gave us trouble. We then got some*  
*Crosby & by using that occasionally the*  
*sparking stopped - We agreed at the time that*  
*if the Commutator had this treatment 2 or 3 times*  
*daily we would have no trouble with Commutator as the*  
*Crosby checked at the start of the following the cutting - do you use*  
*Crosby right along*

Referred to Mr. Barrie for explanation Barrie

*When a motor starts badly we find*  
*the only cure is to shut down & have it*  
*ground out from coupling clean commutator*  
*thoroughly & put on new set brushes this*  
*cure fails to cure the trouble, we also find*  
*commutator cannot be cleaned properly while*  
*running hence the shut down which takes*  
*about 30 minutes*

*Done*  
*Ad Barrie*

New Village, N. J., Oct 29

NOV 12 1903  
Oct 28 1903  
*Orange - 102903*

[ON BACK OF PRECEDING PAGE]

In our first test in Electrical dept we used  
a stick coated with Crocus & could  
clean Commutator perfectly & stop  
spark while running - do you use  
the stick with Crocus - I cannot  
understand why it worked then  
& doesn't work now - 2

2-

2nd Reply Nov 13 # 03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

yes we use the stick with the crocus  
and sand paper and we find the crocus  
with a slight quantity of oil will keep a  
Commutator in fine condition providing the  
Motor is all O.K. but if you have  
got a Motor with short circuit in armature  
at the Crocus you can use will not clean  
it up. Barnes

NGV - 4 1903

Number 68

## TROUBLE INQUIRY.

**Edison Portland Cement Company.**

0.130 mg

Orange, N. J., \_\_\_\_\_

Oct. 27, 1903.

Mr. H.S. Moulton, Manager.

On: \_\_\_\_\_ Log: \_\_\_\_\_ Report of: \_\_\_\_\_ Oct. 23 \_\_\_\_\_

Item 3.35 Department Roaster No. 2

Shut down- Tail brick fell out.

What is cause of tail brick coming out? I thought this

had been fixed for good by inserting in the brick so as to protect from fire.

Do you not think the <sup>problem</sup> is due to down hill expansion of brick - we can't see how anything will hold it without there is some 4218 lb/mg somewhere, as best as I can tell.

THOMAS A. EDISON, General Manager.

THOMAS A. EDISON, General Manager

Referred to Mr. \_\_\_\_\_ for explanation

I thought so too. Well, it seems that the best makes the wrought iron bottles better & they make the best cast iron we have found it the best possible for a work job, and am getting out a pattern for a C.I. piece in the plan

When we wash these Roasties we should have  
this big can in shell.

New Village, N. J., 10-28

190

(2) without holding brief in place  
was pleased by written  
brief to Assembly - 10-31-03  
Larkin  
11-2-03.

11-2-73.

Orange office

NOV - 9 1903

Number 70

## TROUBLE INQUIRY.

NOV - 8 1903

### Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H.S. Moulton, Manager.

On Log Report of Oct. 23,

Item 11-40 Department Clinker Fine Grinder

Shut down - Belt pulled apart on drive of No. 1/ Grinder. Waiting for belt man to lace belt and put it on.

1 - Why did it take 3 hours to replace belt on No. 1/ Grinder?

2 - (25 minutes to get the machine there strikes was slow. Cant this time be improved)

THOMAS A. EDISON, General Manager.

Referred to Mr.

Pilling

for explanation.

2. Pilling 11/4/03

The actual time on this job was 2.15 taken up about as follows.

From time notified to getting the machine there 25 min

Repairing Belt 60

Putting on Belt 30

Taking up outside Belt 20

The time on other time Cards is given as 3 hours for the job. The extra 45 min over the above being taken in getting the tools away, and carting the Edging Machine back to place.

2 - New Village, N. J., Oct 29 1903

NOV 26 1903

NOV 3 - 1903

lophur

07 Pilling

[ON BACK OF PRECEDING PAGE]

The 25 min. referred to on the other side, does not seem to be understood. On a belt breaking as in this case, the first thing is a trip from wherever I may be found, to the fire grinder to examine the belt. I then go hunt for the trigger to cart the machine, <sup>should the machine be needed</sup> ~~from~~ the belt house to the fire grinder. I may find the beam in 5 min or I may not find him for 30 min, it all depends where he is. again I may find the wagon loaded so that I have to go hunt for another wagon. anyway it is looked at. the time taken for this matter is purely a matter of circumstances.

Should the break be in the filler no machine is needed. but if in the long end of the belt, we need the machine there, and we are then dependent on others.

O Filling

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

I am looking up some small hand ~~instruments~~ for the purpose + similar ones + think it will reduce such delays to a minimum.

W.H.H.  
11-4-23



Orange office

NOV - 9 1903  
Number 71

# TROUBLE INQUIRY.

Edison Portland Cement Company. OCT 30 1903

Orange, N. J., Oct. 27, 1903.

Mr. E.S. Moulton, Manager.

On Log Report of Oct. 23,

Item 2-45 ✓ Department Clinker Fine Grinder

Shut down- Oil pipe broke on line shaft when belt pulled apart.

Other did not find it out until we started to run. Waiting for

pipe men to fix it.

(1) Will Oil pipe break every time big belt breaks on No. 1  
Grinder? If liable to be broken, can it be changed or protected?

(2) Mason - What are you going to do about it

THOMAS A. EDISON, General Manager.

Referred to Mr. Betts for explanation.

1 { The main supply pipe is  
being changed & will be protected by braces in building,  
the connections to oil filters will have to be  
protected by some very substantial guard as the weight  
of this belt running at 3600 ft per minute will make  
every thing except the most substantial structure

2 { we have changed main oil line lower head  
and do not think but breaking can upset & now,  
it may break right feed or oil cups at pump  
but this should not cause any delay

New Village, N. J., Oct 29 190

OCT 28 1903  
W.H.H.

W.H.H. 11-4-03  
As Betts

Orange office

100-23003

Number 73

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 22,

Item 3-06 Department Chalk Plant

Shut down - Scraper conveyor 113 choked up, slow speed.

Why did it choke? There is something radically wrong here. Investigate.

*TE*

THOMAS A. EDISON, General Manager.

Referred to Mr. *Purman* for explanation.

*This evidently is a mistake as we had no trouble with Con. # 113 choking. Am endeavoring every day to have a more careful record kept in Log Book.*

New Village, N. J., 10-29 1903

OCT 28 1903

*Letter*

*Purman*  
*Am*  
*working*

Orange Office

NOV - 3 1903  
Number 72

## TROUBLE INQUIRY.

NOV - 23 1903

### Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H. S. Moulton, Manager.  
On Log Report of Oct. 22,  
2-58 ✓ Department Chalk Plant.  
Item Slow speed- Fuse blown head Con. 113.

Why did fuse blow on Conveyor 113, better investigate?

1 This conveyor if all free should take very little power and I am surprised that the fuse blew.

2 What was the trouble with the  
breakers that they had to be changed  
are breakers changed, often, are they changed on  
intermittently working motor when running  
THOMAS A. EDISON, General Manager.

Referred to Mr. ~~Pingree~~ for explanation. 2- Barnes 11/4/03

1 The cause of fuse blowing (Mr. Goodwillie states) was due to an accidental short circuit. Electricians were putting on new brushes, while motor was running, and brush slipped from hand of electrician letting the cable cross on two rings on yoke causing short circuit and fuse to blow.

(2) mine

New Village, N. J., Oct. 29 1903

OCT 28 1903

NOV 3 - 1903

copy

Pingree

2nd Reply Nov 4, 03

As Barnes Ave

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

2nd Reply

Motors was sparking badly. Electricians  
managing to put on brushes without shutting  
down mill. Yes brushes are changed after  
about four or five at once. we started mill  
the <sup>motors</sup> gives us more trouble than any  
other motors on the Plant, brushes cannot  
be changed while running with safety  
brushes are returned to Electrical Dept and reground  
an end and used second time. Electrical Dept  
are ordering some new brushes and we hope to  
find the kind that will <sup>not</sup> bother us any more.  
Danno

104-100  
#4-23

Orange office  
no 9c to cover

Number 74

## TROUBLE INQUIRY.

NOV -13 1903

### Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H.S. Moulton, Manager.

On Log Report of Oct. 21,

Item 10.00 Department Crusher Plant.

Waiting for speed, unable to start engine on centype. Loosening  
frictions on giant rolls in order to turn engine.

Inability to start the engine in Crushing plant is beyond  
my comprehension. How has it been done heretofore? Please run  
this down because there is no apparent reason for it.

*TAG*  
THOMAS A. EDISON, General Manager.

Referred to Mr. *R. H. Langman* for explanation.

*Rolls were adjusted. Engine could  
not start when rolls are not open.*

*I understood the Rolls had all been  
cleaned but something was jammed loose  
fell in.  
Langman*

New Village, N. J., Oct. 28 1903

OCT 28 1903

*R. H. Langman*

Orange office

Number 75

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 21,

Item 11-03 Department Chalk Plant  
Shear on grinders (Large dowel pin stuck fast in flange of drive)

1 Please explain cause of dowel pin sticking fast in flange after a shear on grinder.

2 Can this be prevented in the future

THOMAS A. EDISON, General Manager.

Referred to Mr. Purgason for explanation.

1 The cause for dowel pin sticking fast in this case - was that dowel pin had not been kept in proper condition. Having dusts and rough places on it and for some not driving pin before driving into hole. Also driving pin too hard.

2 This pin had been handled carefully, do not accept any more lumber from this concern.

New Village, N. J., Oct. 29 1903

OCF 28 JUN 13

NOV 3 - 1903

Coffey.

Purgason.  
11-4-03

Orange office

607-2 1903

Number 77  
607-2 1903

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Mr. H.S. Moulton, Manager. Orange, N. J., Oct. 27, 1903.

On Log Report of Oct. 21,  
Item 2.00 P.M. Department Register No. 1.

Shut down on account of packing ring and oil out of bearings 2nd  
and 3rd intermediate shaft.

1 ( Why did packing ring come out of 2nd and 3rd Intermediate  
shaft? Please investigate. Were rollers put in? Whose fault  
is this?

2 Cannot longer rollers be used, or something  
done to kill this but -

THOMAS A. EDISON, General Manager.

Referred to Mr. Cary for explanation. 2 Wagon 11/4/03

These rollers are furnished by roller  
department after roller and packing.

1 These pins frequently shear off after  
become considerably worn where they are  
subjected to considerable vibration.

See also Inquiry # 77-81

(2) from

New Village, N. J., 10-29 1903

OCT 28 1903

Thos Cary  
over

NOV 3-1903

[ON BACK OF PRECEDING PAGE]

Have been drilling some holes larger  
for cattle some of holes are out  $\frac{1}{2}$  thread  
and cattle will put legs in without drilling larger to  
get both holes in line

Sept  
11-4-03

M W Meyer

Oil Dept

TROUBLE INQUIRY.

Department

Part

Nature of Trouble



*Orange  
Office*

10-180-100

Number 96  
101-9 100

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 21,

Item 4-18 Department Roaster Plant No. 2

Shut down on account of hot motor, changing motors.

!

What is cause of hot motor and changing same?

✓

What are you going to do with this high bar  
Can it be fixed

THOMAS A. EDISON, General Manager.

Referred to Mr. A. H. Goodwillie <sup>report</sup> for explanation A. H. Goodwillie

1

There was high bar in commutator which  
caused sparking and heating. As commutator  
could not be brought down to good surface  
had to change motor.

*THY*

New Village, N. J., 10/29/03 190<sup>3</sup>

OCT 28 1903

*W. H. H.*

*A. H. Goodwillie*

Orange office

NOV - 2 1903  
NOV - 9 1903

Number 80

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 20,

Item 2-45 Department Mixing Plant

Shut down for hot bearing pinion shaft Conveyor 106.

What is cause of hot pinion bearing Conveyor 106?

2 How did the oil become exhausted  
was there a leak in casing,  
THOMAS A. EDISON, General Manager.

Referred to Mr. Lewis for explanation. 2 Moyes 11/4/03

1 The cause of this bearing heating was  
lack of oil.  
The oil had become exhausted until  
the chain failed to supply enough to  
properly lubricate the bearing, when it  
immediately became very hot.  
Had shown no signs of distress before.

(2) I did not get any report of this bearing over does  
my log of Oct 20<sup>th</sup> show that any thing was done to the  
New Village, N. J., Oct 29<sup>th</sup> 1903  
G. G. Lewis oil dept

OCT 28 1903

NOV 3 - 1903

[ON BACK OF PRECEDING PAGE]

I made a mistake on this report  
I did oil the bearing in question it does not  
at the time and no trouble since very sorry to  
have made the mistake

W. H. H. H.  
11-6-03

M. W. H. H.  
oil dept

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

*Orange office*

100-3 903 Any - 2 1903  
Number 81

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H.S. Moulton, Manager.

On Log Report of Oct. 20th,

Item 7-40 A.M. Department Roaster Plant

Shut down on account of third intermediate shaft bearing hot.

Why did 3rd Intermediate shaft bearing get hot? Probably explained by what occurred next day. Whose fault?

*Marion Please Explain this -*

THOMAS A. EDISON, General Manager.

Referred to Mr. *Canby* for explanation.

*Written does not clearly consider from what is referred to but thinks probably this trouble was due to an over heated motor on # 2 roaster drive.*

*I cannot find exactly what was the trouble here. It seems that the bearing was looking some & was re oiled & packed and that it had to be oiled again next day.*

2 *Canby*  
New Village, N. J., 10 28 1903

*Thomas Edison*

OCT 28 1903

NOV 3 - 1903

[ON BACK OF PRECEDING PAGE]

(2.) I am unable to find out just who is responsible or what the trouble was. It seems that the statement on Roanoke logging by some country superintendent. Meyer had a heavy pack of oil bar. which had been leaking. I thought at first that it was a heavy that Cary had changed & forgotten to notify oil man but I was mistaken.

WPKM  
11-4-03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange office

NOV - 3 903 NOV - 3 1903  
Number 62

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Oct. 27, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 20th.

Item 311 3-10 A.M. Department Roaster Plant

Shut down on account of putting on new brushes Roaster motor.

Why are we having so much trouble with Motors driving  
-kinds? What's the amperage?

Is Crocus paper used by Barnes man - was Crocus  
paper used in this motor? Is all motor commutator glazed  
or only those not cleaned by Crocus paper - is this  
glazing general -

THOMAS A. EDISON, General Manager.

Referred to Mr. ~~Edison~~ for explanation. - Barnes 11/4/03

This is motor which was taken out next  
day. As we have trouble with the carbon  
brushes glazing over and forming a hard  
surface we find we can stop sparking  
by putting on new set of soft carbon. This  
was done in this case.

The amperage of this motor varies  
from 45 to 60 amps. which is only half  
full load.

(2) New Village, N. J.,  
written

10/29 1903

R.H. Goodwillie  
over

NOV 28 1903

NOV 3 - 1903

[ON BACK OF PRECEDING PAGE]

TRouble INQUIRY.

Department

Part

Nature of Trouble

2nd Reply

Yes Crocus paper is used by Motor Inspection  
daily as as often as found Messrs. Yes both  
Crocus & 2nd paper was used in this Motor  
Yes the glazing of franchises on contact ends are  
General this is the cause of shorting to some  
extent we also find some of the Committee glass  
over and would be please to have them  
all do so as we find this is the Motor  
that runs without trouble

Bam

Nov 4, 08

border  
11-4-08

*Assigning  
Affairs*

OCT 13 1903

NOV - 10 1903

Number 84

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 28, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 24th,

Item 2-40 P.M. Department Roaster Plant

Shut down on account of thrust flange on cooler broke.

1 What caused thrust flange on cooler to break? Can it be fixed so this will not occur again?

2 *Whereas when you propose changes like this let me know - I want to keep track of all changes*

*THOMAS A. EDISON*  
THOMAS A. EDISON, General Manager.

Referred to Mr. for explanation.

1 *I think this was due to excessive expansion of the C.I. Ring & the W.I. shell. We have always had trouble with the bolts holding C.I. Ring to clips on shell. Coming loose we set the upright & shortly afterwards the bolts and on the other cooler one or two of the bolts snapped off. I have gotten out sketches of another Ring & am getting Ames on a Sixty Casting in 3 sections. So cooler will not have to be moved to running.*

New Village, N. J., 10 - 209 1903

2- (from)

*lost*



[ON BACK OF PRECEDING PAGE]

R I had only gotten out sketch & asked for prices  
& lettered it one week or when in Orange last.  
When such came and I will send you prints  
hereafter

W. H. M.  
11-6-03

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_

013142

Number 85

*Change  
Office*

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 28, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 24th.

Item Department Roaster No. 2.

Not running, on account of repairing retaining ring for nose brick on front end.

Was breaking of holder of nose brick due to expansion?

If so, nothing will prevent it in my opinion except a provision for expansion. Warren says you are going to use heavier belts.

*TH*

THOMAS A. EDISON, General Manager.

Referred to Mr. for explanation.

*Do not think it was caused by expansion but by the W.T. belts becoming very brittle & breaking from the strain caused by slight movement of brick. The reason it took so long to repair it was in attempting to put back the ring which was 1" x 2" x 3" angle. It broke by the strain of drawing up on belt. The machine broke like Q.T. with large chunky teeth. We removed it out of the & will get some castings to make a new place.*

New Village, N. J., 10-29-1903

*W.H. Mason*

OCT 29 1903

*Orange office*

NOV 14 36 Number 86

NOV - 13 1903

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Oct. 28th, 1903.

Mr. E. S. Moulton, Manager.

On Log Report of Oct. 28th, 25th,

Item 7-48 Department Chalk Plant.

Shut down, repairing brush holders on motor of Con. 111.

What was repaired on brush holders of motor on Con. 111?

2 What has Mr. Goodwille to say regarding the time lost - 23 m

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes - for explanation. 2 - Goodwille

11/4/03

brush holders when not repaired. Yoke studs became loose and the shut down was to tighten up same this should not have been 10 minutes work was done by Electrical Dept.

Log is incorrect - brush holders were not repaired. Studs were loose causing brushes to tilt on edge and spark. After studs were tightened brush holders had to be reset with gauge which takes 30 more time to simply tighten stud.

New Village, N. J., Oct 30 1903

NOV 3 - 1903

OCT 29 1903

*W. H. H.*

*W. H. H.*

*over.*

[ON BACK OF PRECEDING PAGE]

We have discovered, by testing in the laboratory, that the fiber washers on brush holder yokes shrink from heat, it is not very much but enough to loosen stud and inside brush brush only on top which causes excessive sparking. The water tenders are tightening them up as fast as possible and they remain tight after being set up once or twice.

corrected  
11-12-23

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_

Orange office

NOV - 2 1903  
Number 90  
NOV 16 1903

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 28th, 1903.

Mr. H. S. Moulton,

Manager.

On Log Report of Oct. 25th.

Item 2-40

Department

Crusher Plant.

Shut down- Repairing motor on conveyor 103. Putting new brushes  
on motor.

Why was motor on 103 repaired in Mill time? Why was it  
necessary to renew brushes? If necessary, why was it done in Mill  
time, when there was two hours wait in the morning for ore? This  
does not look right; please investigate

Barnes Does your men on each inspection give  
the Commutator a slight rub with the Crocus cloth? *Yes*  
THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes for explanation. 2 - Barnes  
3 - Barnes

? because it required immediate attention  
we find a lot of new brushes and cleaning  
the commutator is the only cure for bad  
 sparking this was done in Mill time  
because it had to be done at once  
or let the motor go. He had again  
it was not possible for inspectors to  
know the motor cracked until after  
starting up and running some time  
as this motor is one of the last on

(2) New Village, N. J., Oct 30

1903

NOV 12 1903  
NOV 3- 1903  
OCT 29 1903

not Barnes

over

Delay 15 minutes

[ON BACK OF PRECEDING PAGE]

③ It will do no harm to try the  
Experiment. 2

3 O.K. will try some Experiments in their line  
using sheep wool combing/cranes with canvas and  
also cotton to take up wools dust. *Parns*  
3d Reply Nov 13 # 03

*Wether*  
11-13-03

TROUBLE INQUIRY.	Department
	Part
	Nature of Trouble

2- Not on every visit but often enough  
to keep Wometates in good running condition  
we did not think it was necessary at every  
visit but will have it done so if you  
think necessary

*Yours Parns*

2nd Reply Nov 4 # 08  
*Wether*  
11-4-03

Orange office

NOV 12 1903 NOV - 2 1903

Number 92

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 28th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Oct. 24th,

Item 2203 Department

Oil leaks out of joint of thrust cap on motor driving 1st. 36"  
Clinker Crusher rolls. Moyer, see if you can fix it.

Did Barnes' man report this to Inspector, or did he  
miss it and leave it to be found by General Inspector?

Moyer - This was reported to your dept  
why is it not fixed or fixed right -

THOMAS A. EDISON General Manager.

Referred to Mr. Barnes for explanation. Moyer 11/4/03

Moyer Dept did not report to Inspector  
but to Oil Dept this motor has no oil  
still leaks at this time. Also 11/2/03

- (2) On Oct. 24<sup>th</sup> the following was on inspection book. Oil leaks  
out of joint of thrust cap on motor driving 1<sup>st</sup> 36" Clinker Crusher rolls  
Moyer see if you can fix it. On burning of 25<sup>th</sup> I was fixed and  
has not leaked any more a slight leak at plug at bottom of oil well  
it was fixed and is all right now  
New Village, N. J., Oct. 30 1903

M. M. Moyer  
Oct 30

A. Barnes

NOV 3-1903  
OCT 29 1903

[ATTACHMENT]

Morris Jayne. Look  
this up & report present  
condition.

dox

11-4-03



[ATTACHMENT]

1. Double Copying #12. Disposition #2-2-03.  
The first leak is this <sup>motor</sup> production leak in  
the first cap which was stopped with seal lead in bit head  
and glycerin the seal leak was in lead joint of first  
cap which was secured up tight and stopped. The  
3rd leak was in lead washer and bottom flange  
which was secured up tight and lead bed stopped.  
This last leak was stopped on 11/4/03. Motor driving  
Elc #127 does leak out of wool packing chamber of  
commutator bearing this is due to shrinkage of fiber  
washer on shaft which acts as an oil slinger and  
can be stopped by shutting down motor from four  
to twenty minutes.

11/6/03

M. D. Jayne.

~~copy~~  
11-10-03

Orange office

NOV - 9 1903

NOV - 2 1903

Number 93

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 28th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Oct. 24th,

Item 2204

Department

One bolt out of one flight clamp on Conveyor 122. Cary.

Could the men in charge have found this?

11/4/03  
2  
Jayne - hereafter find if the men in charge  
knew of the things you find & have  
reported to foreman. When put down item & say  
previously reported to foreman by man in charge, this  
THOMAS A. EDISON, General Manager.  
will prevent nagging & irritating the foreman.

Referred to Mr. Radner for explanation.

Jayne not  
to sign

1  
Yes, & we always have  
them put in the first step  
we make. In the  
meantime the Inspector  
came along & discovered the  
same trouble.

New Village, N. J., 10/31 1903

M. Radner

NOV 3 - 1903  
NOV 25 1903

M. A. Jayne  
11/4-03.

Oct 21 1905

NOV - 9 1905

*Discharge  
Office*

Number 97

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 28th, 1905.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Oct. 28th,

Item 2209 Department

Should there not be guards over bevel gears driving Cooler No. 1?

Yes, Cary.

Why didn't Rader suggest this before the Inspector. He has the brains, let him exercise them.

1  
2  
I notice at first the chief of Repairs had 18 men now he is cut down to seven - from that date to this the mechanical force has been increased from 54 to 58 - Do you think this is a good distribution, THOMAS A. EDISON, General Manager.

Referred to Mr. [Signature] for explanation.

This had been [Signature] speaking more than once but there is a limit to the amount of work that can be done by a certain number of men in a given time

2  
I saw that Repair men were getting low and was talking Slops to increase it with right class of men but they were discharging & hiring faster than I could supply them. It is somewhat better just now

New Village, N. J., 10-29 1905

*W. H. C. [Signature]*  
11-6-05

REV - 9 3103

OCT 21 1903

Number 100

*Change  
Office*

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 28th, 1903.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Oct. 24th,

Item 2212 Department

Should there not be guards over drive of Roaster No. 1? Ordered.

Why didn't Rader suggest this before the Inspector? He has the brains, let him exercise them.

*I find by reference to work book that you beat the inspector twice during year for Rader*

THOMAS A. EDISON, General Manager.

Referred to Mr. for explanation. *Rader*

"Ordered" means that an order has been issued for this work before this came in

New Village, N. J., 10-28 1903

*W. H. Mason*

OCT 29 1903

NOV - 4 1903

Number 101.

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 28th, 1903.

Mr. H. S. Moulton, Manager.

On LOG

Report of

Oct. 26th,

Item 9-59

Department

Crusher Plant.

Large rock stuck in hopper at giants. Removed by rolling smaller rocks in.

Why does Dan Smith allow his shovel man to land rocks in ship in such a way that they will get across hopper at Giants?

If they are long he can pull them in so they will fall right way.

At Edison when we got a long chunk in ship so it was liable to get across hopper, shovel man was trained and he chained it on the skip and swung it around right before it went to Mill.

THOMAS A. EDISON, General Manager.

Referred to Mr. Dan Smith, <sup>10/26</sup> for explanation.

my aim is to load these cars right - if a car has been loaded wrong by me I have not noticed it -

R. C. Young

New Village, N. J.,

11-2

1903

Lester

Orange office

NOV - 5 1903

Number 106

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 29th, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Oct. 26th,

Item 7- A.M. Department Chalk Plant.

Taking up belt on grinder and fixing lighting wires and Oil pipes  
caused by broken belt.

Why did it take over five hours to fix belt on Chalk  
rolls?

Ans we likely to have this again  
in respect to Oil system,

THOMAS A. EDISON, General Manager.

Referred to Mr. Pulling for explanation.

The time on this job is 6.00 hours (see times and)  
The damage occurred early in the morning and  
the belt had been untangled and partly put on when  
we started work was finished and ready to run at 8 AM.

The Oil Pumping - fixing up and with covers  
on both the new  
water.

No I do not think it will occur again as we are running  
main up again. water 11-5-03

New Village, N. J., Oct 31 1903

D F Pulling

NOV 3 - 1903  
OCT 30 1903

*Orange office*

NOV - 5 1903

NOV - 12 1903

Number 109

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 29th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Oct. 26th,

Item 2216 Department

One bolt loose in small gear case of Conveyor III. Gary.

Did the man on duty report this to Inspector or did

Inspector find it himself?

*1*  
*✓ Who should have found it.*

THOMAS A. EDISON, General Manager.

Referred to Mr. Thomas Edison for explanation.

*1*  
I found it.

*2*  
It should have been found by Burgess man  
in top floor of blown house  
Letter 11-3-03

New Village, N. J., 10/31 1903

*copy.*

*W. J. Jayne.*

NOV 3 - 1903  
OCT 30 1903

NOV - 4 1903

Number 110

*Orange Office*

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 28th, 1903.

Mr. H. S. Moulton, Manager.

On Inspector's Report of Oct. 26th,

Item 2217 is system Department

Small gear case over gears driving 1st. 36" Clinker Crusher Rolls,  
is warm, evidently, gears are dry.

Did man in charge report this to Foreman? If not, why  
not?

*W. G.*  
THOMAS A. EDISON, General Manager.

Referred to Mr. Rader 10/28/03 for explanation.

*Yes, he reported to me and I looked in case. Oil did not touch gears. I oiled gears, I had some oil put in case during day.*

New Village, N. J., 11-1 1903 *N. Rader*

*W. G.*



Orange office

Number 118

NOV-2-1903

## TROUBLE INQUIRY.

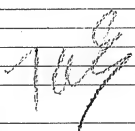
### Edison Portland Cement Company.

Orange, N. J., Oct. 29th, 1903.

Mr. H. S. Moulton, Manager.  
On Chemist's Report of  
Item No. 19, Department

Cement has gone to 85.8, think it should not go lower.

Is O'Brien given these tests daily?



THOMAS A. EDISON, General Manager.

Referred to Mr. \_\_\_\_\_ for explanation.

We try to keep the current at 90 but  
sometimes it takes a drop without any  
reason that can be discerned unless it  
is the variation in the cluster.

A Brown gets 6 reports of tests per  
day, and production is worked very  
closely

New Village, N. J.,

10-29 1903

C. W. H. Mann

*Orange Office*

NOV - 4 1903

Number 125

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 29th, 1903.

Mr. H.S. Moulton, Manager.

On Log Report of Oct. 27th,

Item 12-50 Department Roaster Plant ✓  
Shut down on account of fitting plates on roaster shell flange.

What is the meaning of fitting plates on Roaster shell  
flange? Term not understood.

(2) Let me know Saturday when you  
come to Lab how they are working

THOMAS A. EDISON, General Manager.

Referred to Mr. 106 for explanation.

Thin plates were put on to back  
up the flanges of the shell. They rest  
upon the shell & also run on friction  
while this taking a large part of the  
load & reducing the pressure on the  
flanges of the lower end are beginning  
to break. but they plates seem to help the  
matter very much.

New Village, N. J., 11-2-1903

*W. H. Mason*

Orange office.

NOV -5 1903

Number 126

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 29th, 1903

Mr. H.S. Moulton, Manager.  
On Log Report of Oct. 27th,  
Item 2-22 Department Clinker Crusher  
Shut down on account of cleaning and testing Con. 125 motor.

Why was it necessary to clean motor on 125 conveyor?

Do not the <sup>gummy</sup> chambers work? Is there much dirt? Don't understand this.

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes 11/3/03 for explanation.

This shut down was to clean commotor and put in amp meter. Indromet showed only 10 amperes. See answers to item 2223 Oct 29, 03 # 112. Yes the Gummy Chambers work. And this does not dust in. At the cases where the Chambers is in a very dusty position this is some dust gets in the Chambers with the air and is heated at the gummy daily this dust is blown into the

New Village, N.J., Dec 30 190

W. H. W.

W. H. W.

Ans

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

Leakage due to section of fan we are  
experimenting with anted, and find it  
a great improvement when we can draw it  
from a cool place

Orange office

NOV -5 1903

Number 127

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 28th, 1903.

Mr. H.S. Moulton, Manager.

On Log Report of Oct. 27th,

Item 3-05 A.M. Department Clinker Crusher.

Shut down on account of putting new brushes on motor of lower set crusher rolls.

Why was it necessary to put new brushes on Motor of lower?

Also, if it was known they had to be changed, why couldn't it have been done during the 50 minutes lost at noon? Please give full report on this.

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes, 11/5/03 for explanation.

because old brushes worked badly  
it would not be possible to force  
the end of this chat down. thirteen hours  
earlier in the run as this motor wheel  
expanding some was in no way dangerous  
and the crusher have been caused in  
the brushes to make it go bad probably  
large chunks however the men used to  
brush them out both in good working and

New Village, N. J., Nov 3d 1903

W.H. Barnes

OCT 31 1903

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

Myself have impressed our men with the  
fact that this mission change must  
be made in much shorter time than  
30 minutes rush more

Orange office

NOV - 6 1903

Number 128

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 29th, 1903.

Mr. W. S. Moulton, Manager.

On Log Report of Oct. 27th,

Item 12-20 Department Clinker Fine Grinder.  
Belt pulling apart on drive, of No. 1. grinder. Waiting for belt man  
to fix belts.

What does Mr. Mason propose doing in re pulling apart  
of drive belts so often? Is the larger wire in use, or has belt  
hooks been used yet?

*Please report*

THOMAS A. EDISON, General Manager.

Referred to Mr. for explanation.

*We have large wire but it breaks  
too though not so fast as other wire.  
We are putting belt hooks on now  
and if they prove satisfactory will  
use them every where on heavy drives.*

New Village, N. J.,

11-4

1903

W. S. Moulton

OCT 31 1903

Orange office

NOV - 6 1903

NOV 4 1903

Number 132

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Oct. 29th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Oct. 27th,

Item 2245

Department

Elbow on oil drain pipe near centre of roaster No. 2, left side,

is plugged with cheesecloth. Meyer.

Who found this? Had in charge or the General Inspector?

Moulton - It is refreshing to find a man who owns up.

THOMAS A. EDISON, General Manager.

Referred to Mr. Roden 11/3/03 for explanation.

Both men in charge of general inspector, man in charge reported to me at one time, I neglected having it done (or fixed) just then and finally forgot about it altogether.

Yes Sir. I too, admire the "George Washington Spirit" for truthfulness.

New Village, N. J.,

11/4

1903

M. Roden

NOV 12 1903

OCT 31 1903



Orange office

NOV 25 1903

NOV 11 1903

Number 134

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Oct. 29th, 1903.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Oct. 27th,

Item 2247 Department

Three flight clamps have slipped on bond 128. Carv.

Who found this? Man in charge or the General Inspector?

- 1
- 2 These should not have been reported  
so as to be on record & then given out to  
Repair dept & not direct

THOMAS A. EDISON, General Manager.

Referred to Mr. Rader 11/10/03 for explanation.

- 1 Man in Charge reported  
this to Foreman who  
reported to repair Foreman to  
fix this the first stop  
be made, that would
- 2 I do not think it necessary to have every small item kept on  
Put on the work book.
- COH  
11-10-03

New Village, N. J., 11-10 1903

NOV 20 1903  
NOV 18 1903  
OCT 31 1903

M. Rader

[ON BACK OF PRECEDING PAGE]

2- How could we ever improve anything if we didn't have every little trouble recorded - these notes are invaluable —

3- I am making arrangements to have order books printed on which each farmer will copy the respective department work to be done, these will be turned in to the office & written up. I think this will give us a very complete record of every thing that is going on

C. H. H. H.  
11-25-23

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange Office

NOV 12 1903 NOV -G 903

Number 138

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Oct. 29th, 1903.

Mr. H.S. Moulton, Orange, N. J., Inspector Manager. Oct. 27th,  
On 2251 Report of  
Item Department  
Several idler bearings dry on Con. 100 Moyer.

Did Pilling's man find and report this?

2 - ~~Mr. Moulton~~ - Don't you think Pilling ought to have another man who can go around and inspect for him. I am sure it would pay us. **THOMAS A. EDISON, General Manager.**

Referred to Mr. Pilling, 11/10/03 for explanation.

1 - When I am inspecting a Conveyor, the first thing I look for is the alignment & tension of the belt, the angle rubbers rubbing on idlers, the guide pulleys clearing as much as possible, the condition of the joint covers, the fuel running of the idlers etc. If I find a stuck idler I either adjust same, or report to the oil man if dry, if the rollers are worn I report to the repair dept. I have one man and a helper, and I do not expect them to inspect any thing, if they did it would be an excuse for many delays on the work assigned.

210 New Village, N. J.,

190

NOV 12 1903  
OCT 31 1903

[ON BACK OF PRECEDING PAGE]

to them. of course they are expected to report  
any thing of the kind that they see. but I do not  
expect them to hunt for these things to the neglect  
of our own work.

This answer is for 138-139-140,

Nov 4-1903 O. F. Pelling.

2- It seems to me that the  
comps should be pretty well  
covered by the mill men - But man  
might or may - will form  
of animal inspection. If these  
men attend to their work there  
should be no reason for adding  
another man.

If you want an additional  
man added to this department  
please advise

W. H. U.  
11-12-03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Number. 142

## TROUBLE INQUIRY.

Edison Portland Cement Company. *Nov - 23 1903*

*Orange Office*

Orange, N. J., Oct. 29th, 1903.

Mr. H.S. Moulton, Manager.

On Report of

Item Department

Would like to know about the 12 men in Motor department,  
just where employed, <sup>the</sup> if there is included in this number any  
Carpenters?

*Cross Examined. Is this a bona fide trouble inquiry? Adams!*  
*Then refer to Mr. Edison's letter of the 27th of October, and my public*  
*letter, dated November 2nd, 1903, in all this matter. T. A. Edison, 11-23*

THOMAS A. EDISON, General Manager.

Referred to Mr. for explanation.

*Criticism OK - should have gone*  
*as letter of inquiry*

New Village, N. J., 190

Orange office

NOV - 5 1903

Number 145

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., October 31, 1903.

Mr. H. S. Moulton

Manager.

On

Report of

Item

Department

Please ask Kaufman if Condensing water should not be ejected at a higher temperature than an average of ninety degrees, especially as we have to go to the expense of pumping the water up a considerable height, I have always understood that 120 degrees was about right, but I may be mistaken in this.

*[Handwritten signature]*

THOMAS A. EDISON, General Manager.

Referred to Mr.

*Kaufman 11/3/03*

for explanation.

*When engines are running with  
high load the condenser pressure  
can have a rise of 3 lbs. which is  
not enough to heat water to  
boiling point. When engines work  
with full load at a higher  
temperature will be much higher.  
The water at present is 90°  
and even if we did not have pump  
it would be 100°.*

New Village, N. J.,

1903

*I have already had this matter up  
with Mr. B. & am sure that is wrong  
for improvement at other works.*

NOV 2 - 1903

*11-5-03*

Orange office

NOV -5 1903

Number 155

## TROUBLE INQUIRY.

NOV 16

### Edison Portland Cement Company.

Orange, N. J., October 31st, 1903.

Mr. H. S. Moulton Manager.

On Inspector's Report of October 28th, 1903

Item 2267 Department

One bolt loose in rear intermediate thrust bearing of Clinker

Grinder No. 1. Cary, tighten it; what is the matter with lock?

Did O'Brien find this out or was it the General Inspector?

O'Brien should teach his men

THOMAS A. EDISON, General Manager.

Referred to Mr. O'Brien - 11/3/03 for explanation.

it was the inspector that found it

it is not because I have not time to  
teach them. But men are beyond it  
and good men are not so easy to get  
in my end of the plant

New Village, N. J., Nov 3

190

copy  
11-15-03

NOV 12 1903  
NOV 2 - 1903

Orange office

NOV 2-23

Number 159

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., October 31st, 1903.

Mr. H. S. Moulton Manager.

On Log Report of October 28th, 1903.

Item Clinker Fine Grinder Department

1.57 Shut down- Switchboard tender turned drum switch handle the wrong way, made short circuit 13.

Can't it be arranged so switch tender can't turn handle the wrong way?

THOMAS A. EDISON, General Manager.

Referred to Mr. Good. + Warren, 11/3/03 for explanation.

No. This was that way once & it was impossible to go from full speed to slow speed and run on slow speed without shutting down. Now plant can be run on slow speed and also shut down without blowing fuses.

All trouble of late has been caused by green switchboard man but they are learning to handle switchboard and don't anticipate further trouble

New Village, N. J., 11/12

1903

W. H. Warren  
11-12-03

A. H. Martin  
A.K. W. H. Warren

NOV 2-1903



Orange office

Nov 27 1903

NOV - 5 1903

Number 160

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., October 31st, 1903.

Mr. H. S. Moulton Manager.

On Log Report of October 28th, 1903.

Item Glinker Fine Grinder Department

2. 12 Shut down- Elevator No. 131 blew fuse. 4

1 Why did elevator 131 blow fuse?

2- Cannot switch be arranged so it can't be turned the wrong way?

THOMAS A. EDISON, General Manager.

Referred to Mr. H. S. Moulton 11/3/03 for explanation. <sup>2- Lord & woman</sup> <sub>2-3- Kaufman</sub>

- 1 Switch Board Bender turned down switch handle the wrong way at Switch Board Bender short circuit & blew fuse at #131 Elevator. We did not find it out until we started again.
- 2 No - This was that way over + it was impossible to get from full speed to slow speed and run a slow speed without shutting down. Now plant can be run at slow speed and also shut down without blowing fuses. all trouble of late has been caused by green switchboard men but they are learning to handle switchboard and do not anticipate further trouble. Emmons & Mann

New Village, N. J., Nov 7 1903

NOV 20 1903

NOV 12 1903

NOV 2- 1903

11-16-03

[ON BACK OF PRECEDING PAGE]

2. Most of the troubles in the  
starting up apparatus ~~is~~ has  
~~been~~ right along is attributed  
to green switch board men - are they  
ever do get seasoned, or is the trouble  
due to changing men

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

3. The man starting  
switch board at Green  
grinder is not a green  
man. When the first  
time it was caused by  
misunderstanding between  
switch board man and  
Engineer. As Engineer had  
already shifted switch  
during switch board man  
absence and when he came  
back he shifted switch again.

Done  
11-24-05

J. R. Pearson  
Nov 22<sup>nd</sup> 1905

Orange office

NOV - 5 1903

Number 162

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., October 31st, 1903.

Mr. H. S. Moulton Manager.

On Log Report of October 28th, 1903.

Item Department

Would you not grind as much cement in 40 hours with five or ten pounds less pressure on rope, as you do now with belt and shear pin delays?

*AM*

THOMAS A. EDISON, General Manager.

Referred to Mr. *OBrun* 11/3/03 for explanation.

*i have tried it The Pressure does not seem to change it i think that it is the Platin they are too Hooking they take to serve a hold on the load the old Platin was more of a rolling grind The Platin is hard on bars and wears it they have 70 pounds pressure on them these are worn now about like the old ones if i do not keep the pressure up i have to blow down to get percentage as Platin are worn and i would not be getting out hardly any ore*

Now Village, N. J., Nov 3 1903 *J. B. Biss*

*copy true.*

Orange office

NOV 14 1903

NOV -6 1903

Number 163

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 2, 1903.

Mr. H.S. Moulton, Manager,  
On Log Report of Oct. 29th,  
Item Department Quarry

I notice for last 11 days average feet drilled in Quarry  
124 feet. How many drillers is Smith employing?

This mean 4 Drill Runners & 1  
help man does it

THOMAS A. EDISON, General Manager.

Referred to Mr. Dan Smith, for explanation.

Four drill runners, some times  
if we are working better holes, at a certain  
time we put up an extra drill to  
see them, but only employ four drill  
runners. The drillers must clean off  
benches for drilling, before they can  
drill also repair tools and do all  
other general work. Which is what  
other men do the other work.  
Four drills steady will keep things going

New Village, N. J., 11/4

190-3

After

D. Smith

NOV 12 1903 1-5-03  
NOV 3 1903

over

[ON BACK OF PRECEDING PAGE]

2- 2/10 4 dull runners + 11 Relpies,

11-12-83

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange Office

NOV 25 1903

NOV -9 303

Number 73

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 4th, 1903.

Mr. H. S. Moulton, Manager.

On Report of

Item Department

Please report what is being done about indicating our

engines and a regular schedule of cards taken and figured out by Kaufman?

Do not let the Engineers in charge  
Capable to take readings of taking  
Cards at stated intervals if the suggestion  
is placed for them THOMAS A. EDISON, General Manager.

Referred to Mr. for explanation. 2 Kaufman

1 We have had a good many cards taken  
from each engine & frequency. But at  
present the man who assists Kaufman in  
this work is in charge of the power dept. engine  
as soon as we can get a man for this place  
we will have cards taken regularly.

2 The Engineers are watching always  
as to the taking of cards.

New Village, N. J.,

11-6

1903

W. Kaufman

NOV 20 1903  
NOV 12 1903  
NOV 5 - 1903

[ON BACK OF PRECEDING PAGE]

If you only want cards. I can show them before  
 after. ~~but~~ I thought you would like to see the ~~disposition~~  
 worked up on each. We have a machine shop foreman now  
 & will be able to turn over the man who has been acting as shop  
 foreman to the Power department in a few days.

W.H.M.  
 11-16-03

3. Mason - At Edison Engineers in charge of Engineer  
 snapped his indications several times a day  
 & Chief would take them home twice a week  
 & work out power - We did  
 this regularly & located ~~lots~~ of  
 bad things in mill by them

TROUBLE INQUIRY.

Nature of Trouble

Part

Department

3. I have made arrangements to send you  
 the reports on the power of all the engines in the mill  
 twice a week. We will place the cards here  
 If this arrangement is not satisfactory  
 and you want reports of ~~them~~ please let  
 me know

Loftis  
 11-23-03

Orange office

NOV 10 1903

Number 175

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 4th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 1st,

Item 2314 Department

Filter cup support very loose on rear intermediate bearing of Chalk Grinder, due to thread being stripped on ear screw securing same. Dilts.

- Who first found this?  
T. G.
- I think the foreman of the plant himself or through his men should find these things. They have only a section where the Inspector has THOMAS A. EDISON, General Manager.  
The whole plant to inspect.

Referred to Mr. Piquet 11/13 for explanation. 2. Piquet

- The Inspector - I understand that
- this was suggested on Friday Oct 30th and a second report put in Nov 1st.
  - all right - We shall improve

New Village, N. J., 11-7

1903

NOV 18 1903

NOV 5-1903

W. H. H. 11-9-03

W. H. H. 11-16-03

Piquet



Orange office

NOV 10 1903

Number 178

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 4th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 1st,

Item 2317 Department

Plate looks on cap screws on Chalk Grinder are wearing heads of screws and make a hideous noise. Dits.

1- What found this first?

2- ~~Let~~ suggest foreman train his men to  
look out for these things ~~and find them~~  
a

THOMAS A. EDISON, General Manager.

Referred to Mr. Piquin 11/7/03 for explanation. 2 Piquin

1- The Inspector

2- It is being done. It takes time to  
train these men to think of more than  
one thing.

New Village, N. J., 11-7-1903

NOV 18 1903

correct  
11-9-03

correct  
11-16-03

Piquin

*Orange office*

NOV 12 1903

Number 179

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 4th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 1st,

2318

Department

Item Would suggest a trial of residuum oil in oil cups on conveyor wheels. Moyer, try this.

That is the oil we used at Edison; supposed it was always used on scrapers and elevators as it is the only oil that will stay in.

THOMAS A. EDISON, General Manager.

Referred to Mr. Moyer, 11/10 for explanation.

Oiled all wheels on conveyor 11/8 on Nov 2<sup>nd</sup> used residuum oil and so far it has done very well

We will use this kerosene on all oil wheels had been using kerosene before  
Lester

New Village, N. J., Nov 7<sup>th</sup> 1903

M M Moyer

Lester  
11-10-03

NOV 5 - 1903

*Orange, N. J.*

NOV - 5

Number 180

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 4th, 1903

Mr. H.S. Moulton, Manager.

On Inspectors Report of Nov. 1st.

Item 2319 Department

Would suggest that when any plate bolts become loose on rolls, that bolts, nuts, and loose plate be taken off of roll and cleaned thoroughly. Dilt's, see that dirt is thoroughly cleaned out between plate and arbor before bolts are set up, in order that bolts will not become loose from dirt jarring out after setting.

Is this Cary's job or Dilt's, or does order go to Cary through Dilt's?

*THM*

THOMAS A. EDISON, General Manager.

Referred to Mr. for explanation.

*This is Cary's job. Mr. Moulton marked off this time and as the work would be turned over to Cary - it was not changed.*

New Village, N. J., 11-6 1903  
*W. H. Mason.*

Orange office

NOV - 9 1903

Number 183

# TROUBLE INQUIRY.

NOV 16

## Edison Portland Cement Company.

Orange, N. J., Nov. 4th, 1903.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Nov. 1st,

Item 2323 Department

1. Wheels on Conveyor 114 are dry and run hot. Moist.

Who first found this out?

2. Is thick dope being used on wheels? Yes sir

THOMAS A. EDISON, General Manager.

Referred to Mr. Purque 11/5/03 for explanation. 3. Luyzen

1. Wheels on this conveyor were all oiled Oct. 27 at night - by oil house.  
These wheels do not run over stone or four days until they correct, seemingly.  
Do not know who first found this out as it is almost a continual trouble with these conveyors - And has been, I am told, ever since it was first started.

New Village, N. J., 11-6 1903

copy  
11-6-03

Pingree.

NOV 12 1903

NOV 5 - 1903

Ans. to # 2 - see memo side.

[ON BACK OF PRECEDING PAGE]

Wheels on conveyor No 114- were oiled  
complete on Oct 28<sup>th</sup> with crank oil. We are now  
oiling all with medium oil. Conveyor will be oiled  
to day if check pump pays off long enough.

Nov 13<sup>th</sup> 1903

M M Meyer  
Oil Dept

It was oiled with Medium oil today

-C. H. H.  
11-15-03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange office

NOV 12 1903

Number 191

## TROUBLE INQUIRY.

NOV 16

### Edison Portland Cement Company.

Orange, N. J., Nov. 4th, 1903.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Oct. 31st,

Item 2304 Department

The sides of several flights on Con. 118 wear hard on front side of trough over check bin No. 1. Dits.

Who reported this first?

- 2 I thought we were to cut these flights  
I remember that a pair of clamp cutters  
were proposed to do it in place at Tail  
pulley - What does Mr. Edison propose -  
THOMAS A. EDISON, General Manager.

Referred to Mr. Rader 11/5/03 for explanation.

The Inspector

1 Flights on Con 118 never did  
clear the side of trough. They  
would slightly touch and where  
while running.

Then flights are too close for trough. Some of them  
are pinched a little at center & when leaving of wheel  
run against rail most all of them will slide on one side or  
the other. Dangerous to have them cut off.

2. New Village, N. J., 11-10-1903

Office

M. Rader

NOV 18 1903  
NOV 5-1903

[ON BACK OF PRECEDING PAGE]

Discussion discussing the cutting off of flights on Empire  
con #128 but this was abandoned when we decided to use  
chilled slides instead of wheels and it seems to be all right  
in the particular now.

We have a lot of extra flights for con 118 and I could have  
them cut to size in shop & then substituted for those  
that are too large on con 118 - as we have the opportunity  
that this is the quickest & cheapest way of doing it.

Left here  
11-13-03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange office

NOV 10 1903  
Number 195

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Nov. 4th, 1903.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Oct. 31st.

Item 2309 Department

Oil leaks badly out of joint of flexible drive bearing next to motor driving roaster No. 2. Moyer.

Who reported this first?

2 Are leaks reported by Barnes men sent promptly to oil Dept  
THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes 11/7/03 for explanation. 2 Barnes

1 Cannot say I know we have repaired oil leaks in this plant previous to this date but would not mention it was the procedure bearing

2 Yes Barnes 11.14.03

New Village, N. J., Nov 7th 190  
att Barnes

NOV 13 1903

NOV 7 - 1903

NOV 5 - 1903

letter 11-9-03 - 11-14-03



Orange office

NOV 19 1903  
Number 202

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 6th, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 2nd.

Item 9-58 Department Chalk Plant  
Shut down for electricians to clean commutator and put brushes on  
motors of Cons. 112 & 113.

Why was it necessary to clean commutator and put new  
brushes on 112 Con? I could understand it if it was 113 & 114  
which Mr. Mason promises to shore up to stop vibration, but 112  
Con. I can't understand.

2 Will Mr. Warren investigate this trouble &  
report —

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes 11/10/03 for explanation. 2 - Warren

1 Note: Checked badly under I cannot  
say as everything went OK but we  
have to clean up com & put on new  
brushes & questions go often as every  
24 hours the only idea I can suggest  
is Barnes checks on the same  
trouble account of #125 we changed  
motors and the Bussat motor is doing  
much all OK without a spark

New Village, N. J., Nov 7 1903

NOV 13 1903

NOV 7 - 1903

2. see review note

[ON BACK OF PRECEDING PAGE]

Motor is running O.K. now  
since putting on new graphite  
brushes.

Bulbages of flexible coupling  
have worn very loose on studs due  
to center of armature shaft  
and counter shaft being out  
of line. This causes  
some vibration of  
motor.

W. C. Warren

will have motor reset.

lophu  
11-1603

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange Office

NOV 11 1903

NOV 24 1903  
Number 204

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 6th, 1903.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Nov. 2nd,

Item 2329 Department

Cast iron "A" frames supporting gears driving roaster No. 2 spring badly, this probably is the cause of teeth breaking in pinion. Bitte, look-up and see what can be done to brace it.

Who found this out?

2- Will Mr. Payne please check on working strain & see what the factor of safety is & report if break is due to working strain merely THOMAS A. EDISON, General Manager.

Referred to Mr. Radner 11/10/03 for explanation. I Payne

1 I seen this Oct 9<sup>th</sup> went to the tool room and brought wrench & tighten anchor bolts.

This Slipst Spring in Frame is not the cause of Pinion teeth breaking its the working strain that break pinion

Got home and should have seen when

New Village, N. J., 11-10 1903

11-10-03

11-18-03

Mr. Radner

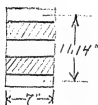
NOV 13 1903

NOV 7 - 1903

2- See answers made on reverse side.

[ATTACHMENT]

W. Double Inquiry # 204 11/14/03. Answer #2



21 R.P.M.

14 TEETH.

3 1/2 CIR. PITCH.

Ultimate stress of cast iron 50,000 lbs.

Ultimate # at this stress = 117.

Apparent # developed in running motor = 16.

Apparent factor of safety = 7.3

Apparent stress 6400 lbs.

Thickness of broken tooth 1 1/8" which is the correct thickness of tooth for 3 1/2 Cir pitch showing that little wear had taken place, the frame supporting these gears is not much heavier than belt conveyor frame, the first tooth broke only half out of position, this indicates that tooth did not go on whole length, the strength of frame would cause gears to break off.

M. S. J. J. J.

Orange Office

NOV 14 1903 NOV 24 1903

Number 210

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H.S. Moulton, Manager.

On Log Report of Nov. 4th,

Item Department Crusher Plant

Crushed 119 cars cement Rock-Placed in Bin No. 2

1. Why were only 119 cars cement sent to Crusher? Does stock get wet on sides of Bin? Are you going to grout it with cement?

2. Log of CP sent here says 118 cars sent to CP

THOMAS A. EDISON, General Manager.

Referred to Mr. Pringle W. H. Smith for explanation.

1. There is no record on Log of number of cars sent to Crusher Plant from Grinding. (But we only crushed 119 cars owing to the fact that 2 or 30" rolls were being repaired.)

Stock does get wet from sides of Bin  
I am having it cemented today.

New Village, N. J.,

11-12 1903

W. H. Smith

NOV 18 1903  
NOV 9 - 1903

Orange office

NOV 12 1903

Number 211

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H. S. Moulton.

Manager.

On Log

Report of Nov. 4th.

Item 7-00

Department Chalk Plant

Blowing-out bearings on Chalk grinder, oil holes plugged with wool.

What is proposed to prevent wool getting in Oil holes of grinder?

2

Have Mr. Moyer talk with Gagnier of 4  
numbers right felt washers under failure  
in Motors & elsewhere - 3

THOMAS A. EDISON, General Manager.

Referred to Mr. Moyer 11/10/03 for explanation.

1

I am packing them a little different  
than what they have been.  
Namely, I close fitting ring of felt cut out  
just enough to clear hole & then 300 grammes  
of wool then another good fitting ring of felt.  
I would suggest a piece of Gage of about  
1/2 inch over hole from behind to reduce hole

We will follow Suggestion

160 New

Village, N. J., Nov 10<sup>th</sup>

190 3

NOV 18 1903

Office  
11-10-03

Mr. Moyer

Oil exp

NOV 9 - 1903

[ON BACK OF PRECEDING PAGE]

I have been over this with McGee & Payne and did find  
the felt washes a failure - every where. But I think that they  
give better results here than the wool alone. I have used two  
two felt washes with wool between them

CO. 4th  
11-16-23

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Copy office

NOV -2 1903

NOV 14 1903

Number 212

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 4th,

Item 3-00 Department Clinker Fine Grinder

Shut down - Elevator No. 131 would not pull the load and blew fuse.

Have we got proper fuse block on Elevator 131 Motor?

- 2- Can it be possible that the Eng'rs do not understand how to make a fuse block that will work satisfactorily - There is something wrong somewhere -

THOMAS A. EDISON, General Manager.

Referred to Mr. Bordwell 11/10/03 for explanation.

- 1- The fuse block is double pole ampere capacity 200. mounted on slate base manufactured by Gen'l Elec Co cat no. 25529. The spacing of the metal parts is suitable for a 250 volt circuit. The full load current of the 50 HP motor at elevator #131 is 190 amperes.

- 2- I have taken it all apart and found lugs very dirty. This would cause bad contact & heating.

New Village, N. J., Nov. 10 1903

APW  
11-12-03

WTH  
11-20-03

R.H. Bordwell

NOV 16 1903

NOV 9 - 1903



Orange office

NOV 14 1903

NOV 20 1903

Number 214

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H.S. Moulton, Manager.

On Log Report of Nov. 3rd,

Item 12-80 Department Crusher Plant

Engine on centre. Loosening frictions of giant rolls in order to turn engine over.

1 Do you have to start giants with bars? If so, I cannot understand why engine will not turn over. What is the friction load?

2 Mason & Chubb friction logs about right, our giants had 70 H.P. friction load.

THOMAS A. EDISON, General Manager.

Referred to Mr. Piquet & Kary for explanation.

1 We always use bars to start Giant Rolls.  
Friction load of Moulton was 140 H.P. of which 43 and 5 H.P. when rolls were not engaged engine has a long run.  
This seems to be excessive. will have power taken for each roll when we have an opportunity.

2 New Village, N. J., 11-11 1903  
J. Kary

NOV 18 1903  
NOV 9 - 1903

#2 see record side

[ON BACK OF PRECEDING PAGE]

2- *Noted*  
*Let them*  
*11-18-63*

**TROUBLE INQUIRY.**

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_

*Orange office*

NOV 12 1903

Number 215

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H.S. Moulton, Manager.

On Log Report of Nov. 3rd.

Item 8-46 P.M. Department Chalk Plant

1 Governor did not work.

What was the matter with the Governor?

2 Will Mr. Purges man be instructed to inspect & oil governor - *WJ*

THOMAS A. EDISON, General Manager.

Referred to Mr. Purges 11/10/03 for explanation. 2 Purges

1 From appearance - Just a lack of oil was the cause of this. Governor not acting.  
Am having a door placed on top of casing, around Governor, so that mechanism can be oiled.

2 - Yes

New Village, N. J., 11-11 1903

NOV 18 1903

*copy*  
11-11-03

*copy*  
11-16-03

*Purges*

NOV 9- 1903

Orange Office

NOV 30 1903

Number 220

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Nov. 4th,

Item 2354 Department

The space between front intermediate roll shaft and packing gland  
in bearing is .01" evidently bearing has worn considerable. Noted.

How much has bearing worn as shown by packing gland?

What is the supposed cause of this wear when the bearing only has  
the weight of the roll on it?

  
THOMAS A. EDISON General Manager.

Referred to Mr. Jayne 11/10/03 for explanation.

This measurement was taken from outside  
packing ring and may not be correct. Here  
after when oil men pack these bearings  
I will take measurement from inside  
packing ring which will be correct and  
will be entered in inspectors report. Most  
of the wear in bearings I think is due to grit  
None of the bearings I have ever been taken  
apart so that the inside condition can be  
seen.

New Village, N. J., 11/26 1903

W. S. Jayne  
11-27-03

W. S. Jayne.

Orange Office

NOV 12 1903

Number 228

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Nov. 4th,

Item 2359 Department

One bolt loose in one plate on rear giant roll. Gary, tighten up and lock.

Who found this out?



THOMAS A. EDISON, General Manager.

Referred to Mr. Pingree 11/10/03 for explanation.

Undoubtedly the Inspector, as I know nothing of a bolt being loose at this time & But have found several loose since.

New Village, N. J., 11-10 1903

C. A. K.  
11-11-03

Pingree

Nov 9-1903

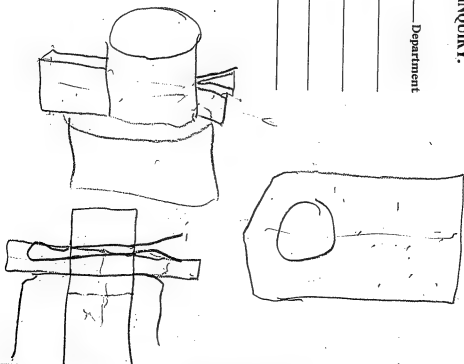
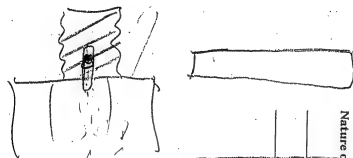
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TROUBLE INQUIRY:

Department \_\_\_\_\_  
Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Orange office

11-20

Nov 28 1903

Number 224

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H.S. Moulton, Manager.

On 2363 Report of Nov. 4th,

Item Rear thrust flange of roaster No. 2 has started to crack, not cracked around shell but similar to flange on roaster No. 1 at rear end. Rader, look into this and report.

- 1- Who found this out?  
2- Rather serious

THOMAS A. EDISON, General Manager.

Referred to Mr. Rader, 11/10/03 for explanation.

#1- I noticed this Nov 1 but could not tell whether it was old or just started. Two days later saw a slight change but before I reported the trouble the inspector found it.  
Rader reported this to me before I saw inspection report.

New Village, N. J., 11-20 1903  
Rader

Nov 9-1903

#2 - see reverse side

[ON BACK OF PRECEDING PAGE]

after this flange began to crack. (it was one of the supporting  
flanges which was turned off to act as a thrust too) I had the  
sectional flange for the span thrust shells bolted to  
the old cracked thrust flange which was braced by  
W.I. braces. it has been running since then  
the way is without trouble.

W. H. H.  
11-30-23

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Orange office

DEC -15 1903

Nov 24 1903

Number 229

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H.S. Moulton, Manager.

On Inspectors Report of Nov. 4th,

Item 2373 Department

A guard wanted over gears driving Con. 128 dangerous. O. K. Cary.

1- Anybody else know of this, or reported it?

2- Has it been fixed *[Signature]*

THOMAS A. EDISON, General Manager.

Referred to Mr. Rader 10/24/03 for explanation. \*2. Hoffman 11-28-03

1- This was unnecessary to report, because it was a well known fact, and as to dangerous no more so than anywhere else where there are open gears.

2- This has been fixed *[Signature]*

New Village, N. J., 10-20 1903

*[Signature]*  
11-21-03

*[Signature]*  
12-5-03

*[Signature]* Rader

Orange office  
DEC - 2 1903

NOV 24 1903

Number 233

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 7th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 4th,

Item 2378 - 2379 Department A  
Bevel gears driving Con. 178 are dry. Rader, keep them oiled. 2378  
Gears driving Con. 178 are dry, no gear case. Rader, dope. 2379

Who first noted this?

2. Why was this inquiry Eleven days  
in the office - hereafter have them go  
out the next day - THOMAS A. EDISON, General Manager.  
I will route check papers  
Referred to Mr. Rader 11/10 for explanation.

1. Men in Charge were instructed not  
to oil or dope these gears to much  
so coal dirt would accumulate in  
or between teeth, as coal dirt packs  
very hard and is dangerous to gear.  
But probably they were dry beyond  
the limit at the time of inspection.

New Village, N. J., 11-20 1903

Lothus  
11-21-03

R. Rader

NOV 9 - 1903

#2 - see serial 126

[ON BACK OF PRECEDING PAGE]

#2 - These shirts are first need by me. Have the original and duplicate one pinned together and passed to Mr. Mason, promptly as they come to me from Orange. W.S. Moulton 11/4/02

Do not give any reason for these shirts having been so long a time in getting to Mr. Raden. It may have been misplaced on my desk. In all cases I attend to them as promptly as possible.

As to your sending them I think it is my plan to do the work and get done. I may stop

W.S. Moulton  
11-20-02

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange office

NOV 14 1903

NOV 20 1903

Number 235

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Mr. H.S. Moulton, Orange, N. J., Nov. 7th, 1903.  
Manager.  
On Inspectors Report of Nov. 4th,  
2385 Department Item

Filter cup on rear ~~and~~ right bearing of clinker grinder No. 1 is  
very loose. 3rd. Notice. Dilts & Cary, how about it?

Why was a 3rd notice necessary?

*Just two*  
Why did not notice go on Dilts Book

THOMAS A. EDISON, General Manager.

Referred to Mr. Dilts - Cary, <sup>11/12</sup> for explanation.

*The first two notices did not appear on my  
book consequently did not know it was loose until  
3rd notice which is on my book. 11/12*

*Large number of same important jobs  
& capacity of both I was responsible for  
the defect in getting this tightened  
so tight it would not move loose.  
& bolts worked with this but were on  
these filters and not hold. The first chance*

New Village, N. J., 11/11 - 1903

*Thus long*

NOV 18 1903

NOV 9 - 1903

#2 - see reverse side.

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1 { We had after discovering this fact we locked both  
with washers clinched against bracket & bolt heads.

We are having  $\frac{3}{4}$ " bolts put in place of  $\frac{1}{2}$ " as the  
half inch bolts seem to be too light for the work.

This Genl /

2- This was supposed to be only a case of setting up & loosening at first  
later I had given directions to have the longer bolts put in. & then  
took it up with Ditts also. Ditts probably had never seen the rigging  
on these ships.

copy  
11-17-23

Orange office

NOV 14 1903

44 240 003

Number 242

# TROUBLE INQUIRY.

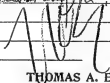
## Edison Portland Cement Company.

Nov. 10th, 1903.

Mr. H.S. Moulton, Orange, N. J., Manager.  
On 9-23 Log Report of Nov. 6th,  
Item Shut down- 250 volt generator running hot. Crusher Plant  
Department

1 Why did the large generator run hot?

2 Why not refer this inquiry to the man responsible instead of trying to ascribe it to



THOMAS A. EDISON, General Manager.

Referred to Mr. \* I' Rauphen for explanation.

1 This was reported wrong Should have been "bearing on 550 Volt generator running hot" This was generator which had just been put in and belt was too tight. The men set it up tighter than necessary in order to prevent it slipping and having an accident similar to the one of the previous day.

2

New Village, N. J., 11-12- 1903  
W. H. Mason

NOV 18 1903  
NOV 12 1903

NOV 14 1903

Number 248

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J.,

Nov. 10th, 1903.

Mr. H. S. Moulton,

Manager.

On Log

Report of

Nov. 6th,

Item

11-45

Department

Chalk Plant

Why was Mill time used to tighten clamps on 113? Loss six hours.

Mill was not running on night of Nov. 4th, couldn't it have been

done then? (11-45 Tightening bolts on rope clamps Con. 113)

*THA*

THOMAS A. EDISON, General Manager.

Referred to Mr.

for explanation.

On Nov 4 the mill was down from a night off and on Nov 6 there was sufficient stock on hand to shut down 6 hours without interfering with output and it seemed to me better the cheapest way to get the done was to have all the mill run put at it under the direction of the Chief of repairs. Otherwise it would have had to require a lot of the day before and as there are not enough men on in night repair crew to do it quickly.

New Village, N. J.,

11-12

1903

W. H. Mason,

NOV 12 1903

Orange office

NOV 25 1903

NOV 17 1903

Number 250

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 10th, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 6th,

Item 8-40 Department Clinker Crusher

Started up and shut down on account of short circuit on Motor Con.

128.

1- What was the nature of the short circuit on Con. 128 motor?

2- Can anything be done in the way of  
looking to prevent this in the future

2nd Question not answered. - THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes 11/13/03 for explanation? Goodwill

1- Electrical Dept had sent an  
new set of brushes this A.M.  
Motors ran all day O.K. but at  
night had the short circuit due  
to one of the brush holders becoming  
loose and falling against the frame  
and to the short circuit

New Village, N. J., Nov 13 1903

NOV 23 1903

NOV 19 1903

NOV 12 1903

#2. See answer made on previous date.



[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

#2-

This is first time we have noticed brush-head  
to come loose in this way and think if beam  
are screwed up tight there will be no trouble  
we have more trouble with other end of brush  
head becoming loosened from brush cannot see  
how this can be remedied at present cannot see  
cause of it due to bad speaking

2nd answer

Nov 23rd/03

Barnes

NOV 19 1903

*Orange office*

Number 256

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 10th, 1903.

Mr. H. S. Moulton, Manager.

On 2389 Inspectors Report of Nov. 5th,

Item Oil leaks badly out of sight glasses on large generator in Chalk Plant. Moyer, make glass tight.

Who first noticed this?

- 1- *None*
- 2- *None Kaufmans man says change of the generator if so should he not have seen it has he been instructed as to his duties. This is discouraging that men having as little to do cannot acc. report such things*
- THOMAS A. EDISON, General Manager.

Referred to Mr. Kaufman 11/10/03 for explanation. 2 Kaufman

- 1- *Inspection*
- 2- *This sight glass was leaking slightly and I instructed the men in charge to make glass tight when glass was well running. It is necessary to let oil down below bottom of glass to make it tight when*

11 New Village, N. J., Nov 13<sup>th</sup> 1903

NOV 20 1903

NOV 12 1903

*11-16-03*

[ON BACK OF PRECEDING PAGE]

should not be done with damage  
causing. There is a repair tank  
kept in the power plant in  
which all repairs to be made are  
put down, but it is sometimes  
necessary to delay such repairs on  
sight glass looking, until a permanent  
job can be made, so it will not  
have to be done over again, which  
would be the case if it was  
patched up in a hurry.

See before  
Nov 22 1903

W. H. C.  
11-24-03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange office

NOV. 25 1903

Number 260

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Nov. 10th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 5th,

Item 2393 Department

One bolt very loose in rear right spacing roll retaining collar

of chalk grinder. Cary, rivet over washers.

Who first noticed this?

- 2- Is there a lot of shut downings when rollers etc. are not put in that men could go over it report such things —

THOMAS A. EDISON, General Manager.

Referred to Mr. P. Wagon 11/10/03 for explanation. P. Wagon

- 1- The Inspectors  
Inspector is right on his job as now when we shut down for lunch and examines rolls every day. Also night Inspector the same.  
Whenever we have a shut or catch it replaces it requires all men for this. However Inspector finds these loose bolts.  
These inspectors cannot be found while running.  
2- Yes. Roll men are now taking advantage of this stop.

New Village, N. J., 11/1/03

1903

copy 11-16-03

copy 11-23-03

P. Wagon

NOV 20 1903

NOV 12 1903

*Orange office*

NOV 17 1903

NOV 20 1903

Number 262

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 10, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 5th,

Item 2398 Department

Top vertical shaft bearing of shaker is worn about 1/2" larger than shaft due to no oil. Dilts, get extra casting Pingree Oil.

Why didn't Pingree notice this and report?

*Suggest Pingree apply a little grease in his pocket & get back things cleaned*

THOMAS A. EDISON, General Manager.

Referred to Mr. *Pingree* 11/13/03 for explanation.

*I did notice this late in P.M. of Nov 4th. But neglected to report on account of looking after other troubles in Ball's Plant.*

New Village, N. J., 11/13 1903

*Pingree*

NOV 19 1903  
NOV 12 1903

Orange office

NOV 12 1903

Number 265

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 10, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 6th,

Item 2401 Department

Several nuts are very loose on rear thrust-rod of roaster #1.  
Rader.

Who first noticed this?

2. Will not Mr. Rader instruct all his men  
+ tell them what to look for + how to do it  
once they are trained some troubles of our troubles  
will disappear

THOMAS A. EDISON, General Manager.

Referred to Mr. Rader 11/6/03 for explanation. 2. Rader 11-30-03

1. The inspector  
man in charge did not try  
them as there were no indications  
for them to be loose.  
Man in charge has been instructed  
to take a hammer and go around  
occasionally and turn all nuts to  
find these troubles.
2. Men are all instructed what + how to  
look for all these troubles, other side.

New Village, N. J., 11-20 1903

Coffey  
11-21-03

W. H. Rader  
11-10-03

W. H. Rader

NOV 12 1903

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

- 2- Men in charge are no trained mechanic's and don't see things as soon as they will after getting acquainted with all details. Men have improved to a great extent since starting. I am sure,

11-24-03

V.P. Radet,

*Orange office*

Number 271

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 10, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 6,

Item 2410 - 2416 Department

Two pipes lying on electric wires in main tunnel under Con. 100.

Goodwillie.

Who is responsible for putting pipes on wires? Does  
Goodwillie inspect the wire system at all? See item #2416-  
same connection (2410) - Would suggest something to prevent chalk  
piling up on electric wires under chalk grinders. Piling, look up  
and report.) *Stringophorus Error. Should have been Pugh*

*WJ*  
THOMAS A. EDISON, General Manager.

Referred to Mr. Goodwillie <sup>11/10/03</sup> for explanation.

*These pipes have been laying in tunnel near cables for a long time - small pipes apparently in use. Cannot find out who threw them on wires. Cables in main tunnel are inspected twice a day and heavy plants, step ladders etc. have been found against cables and removed. There is a printed order, <sup>placed</sup> at intervals in tunnel forbidding anyone except electricians to touch the cables.*

New Village, N. J., 4/16 1903

*W. H. H. 11-16-03*

*R. H. Goodwillie*

NOV 12 1903



Orange office

NOV 17 1903

11-22-03 007

Number 276

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 11, 1903.

Mr. E. S. Moulton, Manager.

On Inspectors Report of Nov. 6th,

Item 2417 Department

Piston rods in air cylinders of grinding rolls get very dry and dirty. Pingree & O'Brien, have them oiled.

Who noticed this first? Why shouldn't cylinder have oil?

Mason - What do you think of Pingree's  
Suggestion -

THOMAS A. EDISON, General Manager.

Referred to Mr. Pingree & O'Brien, 11/13/03 for explanation.

The Inspector. This should also have been seen by Roll men & also myself. Piston rods certainly should be oiled - But there is no provision made for doing so. Would suggest that a different style of gland be used so that packing may be kept adjusted to piston rod better. Also that an oil cup be placed on top of stuffing box to oil rod stem packing. Rust collects on rod and cuts out packing rapidly.

New Village, N. J., 11/13 1903

Pingree

NOV 19 1903

NOV 12 1903

*Young & Co.*

NOV 30 1903

NOV 17 1903

NOV 20 1903

Number 277

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 11, 1903.  
Mr. H. S. Moulton, Manager.  
On 2419 Report of Nov. 6th,  
Item Weight on door of gunny chamber over large generator in linker  
Department grinding plant sticks fast to box that guides weight. Barnes.

- 1- Who noticed this first?
  - 2- Could not men in charge have noticed this?
- 2nd Question not answered.*

THOMAS A. EDISON, General Manager.

Referred to Mr. Kaufman for explanation. 2 Kaufman

- 1- Inspection
- 2- When this was reported men in charge & myself examined guide & weight and failed to find that it stuck fast.

G. Kaufman

Nov 22 1903

New Village, N. J., Nov 13 1903

NOV 23 1903

NOV 19 1903

NOV 12 1903

*Orange office*

NOV 17 1903

Number 278

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 11, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 6th,

Item 2422 Department

Would suggest guard over shearing couplings on feed roll shafts in  
R.S.H. tunnel dangerous. Bits, wood covers, this is an old order.

Why couldn't this have been done before, you had carpenters,  
some have been laid-off?

THOMAS A. EDISON, General Manager.

Referred to Mr. *Butts*, "11/12/03" for explanation.

*This does not appear on my books  
except on Nov-7th-03 + has been attended to  
I have a recollection of hearing this discussed  
a long time ago but that was with the present regime*

New Village, N. J., Nov 13 1903

*copy  
11-13-03*

*Asst. Mgr.*

NOV 12 1903

*Orange office*

NOV 17 1903

NOV 13 1903

Number 279

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Nov. 11th, 1903.

Mr. E. S. Moulton, Manager.

On Inspectors Report of Nov. 6th.

Item 2424 Department  
Nut on one brush holder stud on motor driving Con. #106 is not  
wired. Barnes.

Who noticed this first? Was it Barnes' Inspector?

*I suggest Malar don't keep a book at end  
month see which Inspector has worst record  
than if find it might be advisable to  
get a new man to fill this place —*

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes 11/13/03 for explanation.

*James Sam*  
*Due to my own neglecting to see  
James when he cleaned down and  
fixed Motors up at night*

New Village, N. J., Nov 13 1903

NOV 19 1903 11-13-03  
NOV 12 1903

*At Barnes*

Orange office

NOV 17 1903

Number 281

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 11th, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 7th,

Item 2428 Department

Dust leaks in gunny chamber over motor driving Con. 128 through  
a crack in motor base. Barnes.

Why did not Barnes' Inspector find this out?

Barnes I know your men find the majority  
of troubles & fix them of which I never  
hear of - but its the things I do hear  
of that I ask about

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes 11/12/03 for explanation.

It is quite possible he did in fact  
see find and repair some cracks  
on both defects which never got  
an Inspector's Report

New Village, N. J., Nov 13 190

copy  
NOV 19 1903/1-13-03  
NOV 12 1903

W. Barnes

*Orange office*

NOV 17 1903

NOV 12 1903

Number 285

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 11, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 8th,

Item 8-30 Department Chalk Plant

Cleaning out chute to rolls, ore damp.

Was damp ore caused by wet sides in chute?

What is called damp ore is probably ore

with excess of fines ~~that~~ has shuttling off

chute for few minutes at various

times, this will give Blowers chance to clean

it. I think would increase total output

notwithstanding loss of time

Referred to Mr. Pugh "11/13/03 for explanation.

I think not. As ore was from four to

six feet deep on sides of Bin

The ore was weighed and placed in stock

House on day previous.

New Village, N. J., 11/13 1903

*Coffin*

*Pugh*

NOV 19 1903

NOV 13 1903

Orange office

NOV 30 1903

Number 288

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 11th, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 8th.

Item 1-59 Department Clinker Grinder

Shut down - Belt slipped on Con. 132, this belt was reported to be taken up last night, the belt was left in proper place to be taken up as was No. 143, and they were not taken up.

Whose fault was it that belt of Con. 132 was not taken up?

- 1 - Mason, see about this - at dinner we do not want belts taken up, they don't need it because somebody always has to be to wrong service -
- 2 -
- THOMAS A. EDISON, General Manager.

Referred to Mr. Pilling 11/13/03 for explanation.

Regarding the above, my claim is that I was never asked to take up Con. Belt 132. Although the foreman of the plant claims that such was the fact. And I further wish to be put on record as stating that 132 did not need taking up, even when done on the above date.

Con. 143 was not taken up because it did not need it, and in my opinion it will not be success for a few months, and the longer it can run as at present, the better for the belt.

New Village, N. J., Nov 13 1903

DEC 2 - 1903

NOV 20 1903

NOV 12 1903

O. F. Pilling

[ON BACK OF PRECEDING PAGE]

the taking up of the belt 1000 minutes of the  
Saturday meeting. I was in charge. It seems that  
Mr Dilling did not get it straight.

- 2- It seems that this little ship yet unless it  
is very light & have given directions to report to  
me the next time it fails to turn so I may  
see the conditions.

WTHM  
11-17-23

- 3- Mr Mason will please take  
steps to stop slipping of  
this belt, it has slipped since  
this report, if there is no  
remedy let me know at once.

Part  
Nature of Trouble

Department

TROUBLE IN WORK.

Elesma

- 3 The Chief Engineer had a sketch & was getting out material  
necessary for making a change which will give about  
10 or 15 % more wrap on lead pulley - this will give  
the first opportunity. If it does not satisfactorily will advise  
you

WTHM  
12-4-23



*Investigation*

NOV 30 1903

Number 259

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Nov. 11th, 1903.

Mr. H.S. Moulton, Orange, N. J.,  
Manager.  
On Log Report of Nov. 6th,  
2-40 Clinker Grinder  
Item Department

Shut down - Elevator No. 131 blew fuse, fuse blocks very hot. Waiting to get spill from under tail pulley No. 131 elevator.

Are fuse blocks on Elevator 131 of the proper kind? This report of fuse block getting hot has been made before and same question asked. It would be easy to have a home made block that wouldn't get hot.

*TMG*

THOMAS A. EDISON, General Manager.

Referred to Mr. Good & Warner <sup>11/13/03</sup> for explanation.

At midnight Nov. 16<sup>th</sup> I took the fuse block apart and found that considerable dust had made too contact between the wire terminal and fuse block which would cause heating of the parts in contact. Since then the fuse block has not heated to any extent.

New Village, N. J.,

11/25 1903

*Chas. Good Warner*

NOV 12 1903

*Spencer*  
11-25-03

Orange office

Number 290

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov. 11th, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 7th,

Item 7-00 Department Crusher Plant

Waiting for speed- Running slow speed, trouble with fuses blowing in switchboard in Engine House No. 1.

Why did fuses blow in engine house and no load on belts?  
What was the matter with switchboard?

THOMAS A. EDISON, General Manager.

Referred to Mr. Goodwillie 11/13/03 for explanation.

Nothing the matter with switchboard. Trouble caused by green switchboard man. Being notified of the trouble, I operated switchboard myself and found apparatus O.K. Instructions are being posted at each switchboard so that anyone following them can properly operate board.

New Village, N. J., 11/16 1903

NOV 12 1903

Attest  
11-16-23

R. H. Goodwillie

*Orange office*

NOV 17 1903

Number 291

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 11, 1903.

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 7th,

Item 9-36 Department Crusher Plant

Stop feed- Bearing loose on 3d set 36" rolls.

Why did bearing get loose on 3d set 36" rolls? Were any adjustments made just before they got hot?

*W. G.*

THOMAS A. EDISON, General Manager.

Referred to Mr. *Pingree* 11/13/03 for explanation.

*I think main cause was due to excessive strain and vibration, caused by bad condition of wobbler. This bearing did not get hot. But one on front right side of gear case did. Cause - the excessive end thrust of collar on end of bearing on account of condition of wobbler.*

New Village, N. J., 11/13 1903

*10 PM  
11-13-03*

*Pingree.*

NOV 12 1903

Orange Office

NOV 27 1903

Number 820

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., NOV 13 1903

Mr. H. S. Moulton Manager.

On Inspector's Report of Nov. 10, 1903

Item 2467 Department

Fifth friction wheel from rear and left side of Roaster No. 1  
is cracked, informed by J. Martin. Dilley

**OPEN**

1 Is there enough weight on or is there a lot of friction  
somewhere? Do you dope rails?

2 Clerk got this wrong think it refers to slipping  
of conveyor over clamps at chock house

THOMAS A. EDISON, General Manager.

Referred to Mr. Z. Rader for explanation.

1 Do not understand question. it seems  
to refer to item 128. while this refers to  
one of the wheels supporting Roaster.

2 Yes Sir, there is enough weight, and  
Rails are oiled continually with oil  
Pipe system. Slipping is due to  
dust drying up oil, or not enough  
oil on rails, or clamps get somewhat  
moist with oil, (over)

New Village, N. J., 11-16 1903 W. H. Mason

NOV 20 1903  
11-16-03

2-11-23-03 M. Rader

[ON BACK OF PRECEDING PAGE]

I understand this refers  
to Conveyor cover Clunker stock  
& the reason it slipped has  
been found to wit Boards  
fastened at gunny Chambers  
so tension weight come out  
work —

TRouble INQUIRY.

Department

Part

Nature of Trouble

Clamps and Nails are wiped  
of occasionally.

Dope would be no good, as  
the great amount of dust  
that is floating should have them  
nails dry in a few minutes

11-24-03

2 11-23-03 M. K. Radner

Orange office

Number 244

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov 13 1903

Mr. H. S. Moulton

Manager.

On Inspectors Report of Nov. 10th, 1903

Item 2485

Department

Gears driving bad clinker conveyor #1 are dry? Rader, keep them doped

Should not foreman see that they are doped and not allowed to get dry  
Cannot man in charge at that point be instructed to do it?



THOMAS A. EDISON, General Manager.

Referred to Mr. Rader

for explanation.

These are duties that belong to burner's helper  
and he has been instructed as to these  
nevertheless the Foreman must see these rules  
are carried out. The helper to burner has  
plenty of time to watch these and  
keep them doped.

New Village, N. J., 12-12 1903

officer  
12-16-03

M. Rader

1003

Orange office

NOV 20 1903

Number 2223

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 13 1903

Mr. H. S. Moulton Manager.

On Inspectors Report of Nov. 11th, 1903

Item 2510 Department

I rubber on belt of Con. #111 is wearing on wood on dust curtains  
any have it fixed

1- Could not Pingress man have noticed and reported this to him?

2- I think if Pingress keeps pounding at his men they  
will in time find things all right

THOMAS EDISON, General Manager.

Referred to Mr. Pingress 11/17/03 for explanation. 2 Pingress

1- Yes  
But the class of men we have can only  
see one thing at a time.

2- Men are improving in the discharge  
of their duties and inspections

New Village, N. J., 11/17

1903

Letter  
11-15-03

Order  
11-24-03

Pingress

NOV 23 1903

NOV 16 1903

Orange office

244 012

Number 2444

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 13 1903

Mr. H. S. Moulton Manager.

On Inspectors Report of Nov. 11th, 1903

Item 2513 2514 Department

2513 Skip hoist motor sparks badly. Barnes probably wants cleaning up.

2514 Motor driving giant roll feed is very dirty. Barnes, when was this inspected last?

104

Did Barnes inspector report this. Was it dirty and had it been visited regularly by Barnes man. There appears to have been no inspection of Crushing Plant on 11th as evidenced by temperature cards.

Why is this?

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes, 11/10/03 for explanation.

2513 I clean up this motor personally daily when necessary

2514 Motor was last inspected on 10th by inspector who is in the charge of the plant. Our inspectors just thought the lamp and this did not bother them. They just as fast as look the motor up and failed to find the motor very dirty as reported the motor and as for treated

New Village, N. J., Nov. 17 1903

(over)

AS Barnes



[ON BACK OF PRECEDING PAGE]

It seems to me that we should get a <sup>or compound</sup> ~~simple~~ question  
for the slip can drop as this one sports badly - on account  
of variation in load & raising. it requires a great  
deal of adjustment.

W.H.M.  
11-15-03

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

average office

30-4 2713 007

Number 2445

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 13 1903

Mr. H. S. Moulton Manager.

On Inspectors Report of Nov. 11th, 1903

Item 2515 Department

Wire securing cap of filter cup on front right bearing of  
clinker grinder #2 is broken. Moyer.

- 1- Couldn't man in charge have seen this and reported to foreman?  
2- Is there any way man can do this without danger  
otherwise these bearings will always be neglected

THOMAS A. EDISON, General Manager.

Referred to Mr. Osburn 11/16/03 for explanation.

- 1- The Man attending the Roller has had a Fear  
of going up the rollers since the roller  
putted apart. He claims he goes in looks  
that has oil was running all night - felt his  
bearings and got out. But I have warned  
him. He left out for these things.
- 2- I have looked into this & see no way of making it absolutely safe  
without building a 4" bull head in front of it. Man cannot in time  
without getting in line of it though he has to come. The Bull head would  
be very much in the way for repairing &c. I have changed my mind that way

New Village, N. J., Nov 20 1903

W.H.C.  
11-20-03

W.H.C.  
11-15-03

J.P. Osburn

NOV 16 1903

*Group 10/11*

NOV - 2 1903

NOV 24 1903

Number 3444

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., NOV 13 1903

Mr. H. S. Moulton Manager.

On Inspectors Report of Nov. 11th, 1903

Item 2517, 2518 & 2519 Department

2517 One foundation bolt securing girder supporting gear shafts driving

3rd 36" rolls is loose. Pingree set up

2518 Ditto 1st 36" Rolls in Cr. Plant Pingree set up.

2519 One bolt loose in base supporting rear right housing of 2nd 36"

rolls in Cr. Pt. Pingree

Couldnt man in charge have seen and reported this to foreman.

*OVER*

THOMAS A. EDISON, General Manager.

Referred to Mr. *Pingree* 11/17/03 for explanation.

*These bolts were reported loose to me and  
in turn I reported same to Master Mechanic  
some two or three days previous to Inspector's  
report. Bolt men seem to be watching for  
loose bolts & etc. continually.  
Usually do this work with my men, but at  
this time another plant was running.*

New Village, N. J., NOV - 17 1903

*Arthur*  
11-21-03

*Pingree*

NOV 16 1903

[ON BACK OF PRECEDING PAGE]

2.

Moulton, ~~please find for you~~

~~Had this report got in~~  
Work book it would have been  
attended to & we would have a  
record - please arrange that  
everything gets in Work Book promptly  
& promptly put on the <sup>Neptune Trouble</sup> sub  
work books - Cannot you arrange  
that men at meeting bring these  
things - of course this does  
not prevent the verbal communications  
direct as an emergency

TROUBLE INQUIRY

Department

- \*2. Noted. We have designed a duplication order book for use of  
Mill Foremen with the idea that when they send orders  
to other Foremen they will have a copy of it by means  
of the duplicating feature of their order books and then at the  
afternoon meetings the various Foremen will hand in to the  
Supt. the carbon copies of orders issued by them which carbon  
copies will be passed up by Supt. and entered up in the  
work order book. The duplicating books are being prepared  
and we hope to have them in use in course of few days.

11/1/03

W. H. Moulton

Orange office

NOV - 2 1903

Number 543

# TROUBLE INQUIRY. Edison Portland Cement Company.

Orange, N. J., NOV 12 1903

Mr. H. S. Moulton Manager.

On Log Report of Nov. 11th, 1903

Item Clinker Fine Grinder 131 Department

2.13 Elevator blew fuse as soon as load was thrown on. Cleaning out buckets of elevator to lighten load.

1 - Why did elevator blow fuse the moment load went on? There must be something wrong with this elevator, motor or fuse.

2 - Fuses are supposed to blow at 2 1/2 times normal load - I still think something is wrong

THOMAS A. EDISON, General Manager.

Referred to Mr. Good & Wynn for explanation.

1 - When running slow speed the load goes on and flows about at Road 7 to 132 to con 130. When the load is thrown on rolls all the way then passes through rolls to con 130, but then on on 132 past the dump at Road 7 the load goes on and flows into this con 130 gets a double load for a short time and this doubling in the elevator load, it is almost double for a 1/2 time, sufficient to blow the fuse as motor is working very near its limit under normal conditions.

New Village, N. J., 11-16 1903

2 on copy sent.

NOV 20 1903

[ON BACK OF PRECEDING PAGE]

\*2- Fuses are not supposed to blow at  $2\frac{1}{2}$  times normal load but at 25% above their rated capacity. On all 50 HP motors we have 225 amp. fuses. These fuses should carry 225 amp. continuously and blow out at 25% above that figure i.e. 280 amperes. Now if elevator has heavy load current will easily rise to that value in starting or running short. But to properly protect motor we cannot use a larger fuse.

Attkisson

Optine  
11-30-03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

225  
230  
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250  
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280  
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amys off

11-2-03

NOV 21 1903

Number 347

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., NOV 17 1903

Mr. H. S. Moulton, Manager.  
On Inspectors Report of Nov. 12th,  
Item 2526 Department

Bracket supporting filter cup on rear right bearing of chalk  
grinder is very loose. 3d notice. Deltas have change made as  
directed.

- 1- Why third notice?  
With  $3/4$  balls they still continue to  
2- get loose do that matter

THOMAS A. EDISON, General Manager.

Referred to Mr. Bulbs "11/13" for explanation. 2D Bulbs 11/15/03

- 1- These Bulbs have been  
loosening up in a very short time after  
being adjusted in accordance of being to "Back to normal"  
not show the Great Vibration which the "Bulbs" have been  
placed with  $3/4$  Bulbs & they have caused the  
further trouble.
- I would state that I believe  
these Bulbs have been damaged by the "Back to normal"  
202 per. I believe the best way to fix this is to "Back to normal" and  
to take the place of "Back to normal" with "Back to normal" and  
New Village, N. J., Nov 19 1903

NOV 24 1903  
NOV 18 1903

LOTHAN 11-19-03 within 11-30-03 A2 20/15

#2 see other side of sheet

Orange Office

NOV 21 1903

NOV 20 1903

Number 351

# TROUBLE INQUIRY.

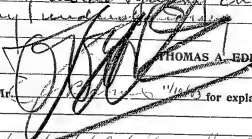
## Edison Portland Cement Company.

Orange, N. J., NOV 17 1903

Mr. H. S. Moulton, Manager.  
On Inspectors Report of Nov. 13th,  
Item 5066 Department Oil & Bearings  
Cotter pin wanted in thrust cap of motor driving Conveyor 125.  
Barnes.

1 Why didn't Barnes' Inspector find this out?

2 Is it not duty of manager to inspect everything made going chambers? I shall certainly find out.



THOMAS A. EDISON, General Manager.

Referred to Mr. Edison for explanation. Barnes 11/17/03

1 I didn't know this. Should be a pin in this place. my Inspector devote most of his time to keeping the motor properly running. Couldn't take time watching the oil in hand. It was quite an easy matter to neglect such a small matter as a pin. I assure it is not because they are not particularly drilled as to their duties.

in the matter

New Village, N. J., Nov 19 1903

NOV 23 1903

correct  
11-19-03

Barnes

NOV 18 1903

#2 see other side of this sheet



[ON BACK OF PRECEDING PAGE]

\*2. Yes it is the duty of Inspectors to report all faults <sup>an motor</sup> in gunning chambers but they did not have any special instruction regarding roller pins. These men are not machinists but green men broken in to this work and the their best to keep things in good shape

2nd Reply nov 27.03 A.B. Barnes

copy  
11-27-03

*[Signature]*

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

--	--	--

Orange office

NOV 20 1903

NOV 21 1903

Number 353

## TROUBLE INQUIRY.

Edison Portland Cement Company.

NOV 17 1903

Orange, N. J.,

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 13th,

Item 5072 Department Oil & Bearings

Oil leaks around thrust cap on motor driving Conv. #137. Moyer.

1. Why didn't Barne's Inspector find this out?

2. Even if not serious it should be  
reported & fixed before out of  
it can be fixed.

THOMAS A. EDISON, General Manager.

Referred to Mr. Barne

11/10/03 for explanation.

2 Barne's <sup>thb</sup>

1. we found but did not think it  
serious by any means

2. Hereafter we will report all leaks within  
flight for attention and we should like and feel  
to report back when same are fixed as our  
inspector do not have time to wait until a  
man reaches the Repair Shop at all times.

New Village, N. J.,

1903

NOV 18 1903

W. H. P.  
11-17-03

W. H. P.  
11-27-03

W. H. P.

*Orange office*

Number 360

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., NOV 17 1903

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 12th,

Item 11-25 Department Roaster Plant

Shut down - Apron between roaster and cooler broke in two, part of  
it came down in cooler.

What is cause of apron between cooler and kiln breaking?  
this didn't do as well as old one. Can it be made so that it will  
be permanent?

  
THOMAS A. EDISON, General Manager.

Referred to Mr. \_\_\_\_\_ for explanation.

The break had worn out and choker was shaking  
on the drive it seemed to have burst it at the  
top, but it crashed all the way down. This may  
have been due to the great strain down a few days  
before while we were trying to patch some  
more holes, - we put the apron in  
horizontal so the choker would wear on choker.

New Village, N. J.,

11-18

1903

WATM

NOV 18 1903

*Orange Office*

44-43 012

Number 364

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., NOV 17 1903

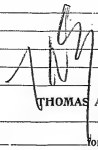
Mr. E. S. Moulton, Manager.

On Log Report of Nov. 15th,

Item 8-30 Department Roaster No. 2.

Shut down- Heavy pattern idler broke put new one in, and tighten-  
ing plates on flange.

Was the heavy idler one with double walls made by Sessions?



THOMAS A. EDISON, General Manager.

Referred to Mr. \_\_\_\_\_ for explanation.

*yes this was one made by Sessions from heavy pattern  
it broke as per sketch.  
I telegraphed Sessions to hold up further castings and sent  
him a sketch to change pattern so metal would be 3" thick.  
He also made it a little thicker at top.*



*broke here all around rim, it was 1 1/2" thick  
changed to 3"*

New Village, N. J., 11-18 1903

*Robertson*

NOV 18 1903

Orange office

11-21-23

Nov 21 1903

Number 367

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Nov 17 1903

Mr. H. S. Moulton, Manager.

On Dec Report of Nov. 14th,

Item 9-52 Department Chalk Plant

Shut down- Loose plates, one broken, tightening plates, and re-placing broken one. Plate ran 8 hours and 55 minutes.

How did plate break? Was it edges or did plate break in two parts? Why this new trouble of loose plates?

2- What is matter with Arbor

THOMAS A. EDISON, General Manager.

Referred to Mr. Edison 11/21/03 for explanation.

1- Edge Broken- This trouble of loose plates is not altogether new. We have had some of this trouble before after changing full set of plates but have had more of it this time possibly on account of this not receiving proper amount of attention from Chief of repair & possibly on account of Ex. Bar for this not getting in bad shape. We have taken precautions which we believe will prevent further trouble from either cause in the future.

New Village, N. J., Nov 19 1903

AMH  
11-21-23

1- Over

AMH

NOV 19 1903 #2

[ON BACK OF PRECEDING PAGE]

- 2- The Arbor is all right. part of the trouble was caused by the machinist in shop not grinding the counter bore for plates properly. we were somewhat disorganized in the mechanical department at that and trouble was not discovered until too late. we have taken precautions which I think will prevent this happening again.
- WTH  
11-30-03

TROUBLE INQUIRY.

Department
Part
Nature of Trouble

Orange office

Nov - 12 1903

Nov 12/1903

Number 371

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov 17 1903

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 14th,

Item 12-51 Department Clinker Fine Grinder

Shut down - Belt slipped on No. 132 Con. Waiting for belt man to take up belt.

1 - Could not the slipping of belt on Con. 132 have been anticipated?

2 - What has Mr. Mason to say about this - This fits my experience exactly - Edison

THOMAS A. EDISON, General Manager.

Referred to Mr. Pillsbury 11/19/03 for explanation.

1 - This belt has been taken up several times when not necessary simply to keep peace in the family. The trouble is that when the rollers or chutes get plugged the first cry is for the belt to be taken up, without any regard for the good of the belt, when as a matter of fact 10 min use of a shovel would do more good. This statement applies particularly to the Climbentoni grinder. The Climbentoni grinders have been cursed of this disease to a large extent.

#2 -

New Village, N. J., Nov 19 1903

Copy  
11-23-03

C. F. Pillsbury

NOV 18 1903

[ON BACK OF PRECEDING PAGE]

2

Pellings answer is alright. I think except in the case of #152 cone, the cover-on has not a very long sag. it is impossible to get it with the 5 drums. And the special roller is set lower than most of the others thus it has less wrap around the head pulley. I am going to try to raise the sag pulley to get more wrap, though it is in a very awkward place.

WPM  
11-30-83

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_



Orange, N. J.

Number. 373

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 14, 1903

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 16th,

Item 3-19 Department Crusher Plant

1 Shut down - Fuse blown on motor con. 103, electricians investigating cause.

What was cause of fuse blowing on con. 103?

2 Why not find the cause since this sheet was found con. 103 has burned out. There are too many reports of "Cause unknown" coming from the Electrical Dept. THOMAS A. EDISON, General Manager.

Referred to Mr. Goodwill "100/03" for explanation. 2 - Goodwill 12-3-03

1 On investigation found evidence of an arc between armature and live contacts on terminal board. Cause unknown

2. 30 Nov. 12/10/03 motor con. #103 did not turn out. It exploded badly & threw out some sparks from connections. Proper care would have prevented it from sparking as it has run well. As to "cause unknown" there are so many inexperienced, irresponsible people looking after motors that it is next to impossible to

New Village, N. J., 11/28 1903

copy 11-30-03 find out anything about them. R. H. Goodwill  
NOV 19 1903 100/03 1113-03

Range office

NOV 25 1903

Number 378

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Nov 23 1903

Mr. H.S. Moulton, Manager.

On Inspectors Report of Nov. 16th.

Item 5085 Department

Oil leaks around sight glass in commutator and bearing of electric motor in No. 2 bin, Rock Stock House tunnel, boiler.

Did Barne's Inspector know of this?

To Mr. Barne's keeping track on his inspection - nothing is so slight to be reported to an inspector of the observing powers, fellow inspector, THOMAS A. EDISON, General Manager.

Referred to Mr. Barne 11/20/03 for explanation.

Gen. M. Inspectors failed to report the leak being so small a slight matter.

New Village, N. J., Nov 20

1903

ATEU  
11-23-03

Barne

NOV 19 1903

Orange office

NOV 23 1903

Number

351

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J.,

NOV 23 1903

Mr. H. S. Moulton, Manager.

On Inspector's Report of Nov. 16th,

Item 2576 Department

But on union is bursted on small air pipe in tunnel near air receiver. Kaufman.

Who should have found this?

I said nothing

W. S.

TH

THOMAS A. EDISON, General Manager.

Referred to Mr. Kaufman 11-16-03 for explanation.

There are many small leaks  
found almost daily on all  
pipe lines under pressure.  
At times the small leaks  
might not interfere with the  
running of plant, which makes  
it undesirable to delay until the  
pipe line at which such leaks  
are observed can be cut out.

New Village, N. J., Nov 26<sup>th</sup> 190

W. S.  
11-27-03

S. Kaufman

*Orange, N. J.*

11-24

Nov 23rd 1903

Number 005

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 23rd, 1903.

Mr. H. S. Moulton, Manager.

On Inspectors Report of XXXXXX Nov. 14th,

Item 2550 Department

Bevel gears driving roaster #1 are worn badly. Dilts, order another set with hunting teeth.

1- Can't this wear be stopped- gears cost money?

2- How about a sleeved frame

*THM*

THOMAS A. EDISON, General Manager.

Referred to Mr.  for explanation.

1- I have gotten out a sketch & am getting pieces of mangonise shut gears for this place. with hunting teeth. When I am told will give both strength & wear. Things have been kept well done but they are hard - & the frame on which they set vibrates some which is bad in this kind of gear. I think the Mangonise gears will solve the problem

New Village, N. J., 11-24 1903

*Edison*

NOV 28 1903

Nov 28 1903

#2 - over

[ON BACK OF PRECEDING PAGE]

2 - I would put frame to 5 ft from it.  
Possible but that requires several days if well  
See what can be done by bracing

*W.H.W.*  
11-20-03

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Orange Office*

DEC - 17 1903

NOV 30 1903  
DEC 21 1903

Number 380

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 23 1903

Mr. H.S. Moulton, Manager.  
On Inspectors Report of Nov. 17th,  
Item 2600 Department

The bore of small pulleys on flexible drive coupling of Con. 112  
are wearing rapidly. Barnes, report.

- 1- What is cause?
- 2- When there are a lot of flexibles in well  
they run out of line & when they do was no  
necessity whatever for it to be pulled & so  
This answer doesn't satisfy me. Favorably  
THOMAS A. EDISON, General Manager.

Referred to Mr. Hoffman 11/25/03 for explanation. 2 letters, 11-3-03  
3 letters - 11-15-03

- 1- Badly put the proper thing in  
these small pulleys
- 2- This is not in the case on some of the pulleys on  
on several other chimneys that I know of which are not out  
of line where pulleys is very badly worn for that reason  
I believe Badly is not equal to the requirements

2- problem see 403

New Village, N. J., DEC 25 1903  
DEC 8 - 1903  
DEC 2 - 1903  
Aspin 11-27-03 W.H. 12-4-03  
APRIL 10  
Came of before Hoffmans time

[ON BACK OF PRECEDING PAGE]

#9. Try hard babbet as used in  
Race bearings - also Brass bushing  
<sup>one or 2</sup> on places that give trouble &  
see which is the best -

#9. will give it a trial  
think a loose Brass bush running fit on  
Pin also running fit in Pulley would be proper  
60172  
12-7-03

Nature of Trouble

Part

Department

TROUBLE INQUIRY.

DEC 9 1903

*Investigation*

NOV 20 1903

Number 898

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 23 1903

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 18th.

Item 2608 Department

Bracket supporting filter cup on rear right bearing of clinker grinder is loose. Cary.

- 1- This defect is constantly reported. Can anything be done to stop it permanently?
- 2- Was a when you came up to Lab bring drawing of a new one & will settle this THOMAS A. EDISON, General Manager.

Referred to Mr. Butts, 11/25/03 for explanation.

- 1- Yes - Make filter cup to take the place of C-7 stuffing Box. Part NO 15410, shown on paper A-439 filter cup & gland to be all one piece & fasten with same bolts to much overhang on present arrangement
- 2- I will send you a casting as soon as received. This was discussed about the 5th of the month & the plan was explained.

New Village, N. J., Nov 25 1903

DEC 2-1903  
NOV 24 1903

W. J. M. 11-27-03 W. J. M. 12-13-03 A. B. B.



Orange, N.J.

DEC - 15 1903

NOV 20 1903

Number 899

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov. 23rd, 1903.

Mr. H.S. Moulton, Manager.  
On Inspectors Report of Nov. 14

Item 2551 Department Oil leaks out of union on drain pipe under roaster #2 near drive.  
boiler.

1- Should not man in charge have found this?

2- Mason - Have Mr Rader keep a  
book with him + get all these  
things on record -  
THOMAS A. EDISON, General Manager.

Referred to Mr. Rader "h/s" for explanation. 2-

- 1- Yes Sir she did report this to me  
a few days before this was  
seen by inspector.  
But I neglected to notify Mr Moulton  
& have it fixed.
- 2- Mr Rader has kept a book showing when these were  
reported. This book was forwarded to you for inspection  
Last week.

New Village, N. J., 11/25 1903

DEC 2 - 1903  
NOV 26 1903

11-27-03

12-3-03

M. Rader

Orange Office

NOV 23 1903

Number 406

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 23 1903

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 18th,

Item 5108 Department Bearing Inspection

Packing ring out in side of blower #4, blower house #1. Dilts.

1 Why did it come out?

2- Wason - Is there any remedy for this -

THOMAS A. EDISON, General Manager.

Referred to Mr. Dilts Nov 13 for explanation.

1 Collar sheared due to flexing shaft  
the shaft strikes shipping box  
occasionally

2- The only way out of it I suppose is to put in larger collar  
this & have replaced done. When had taken all rest when  
blower was put up but spring in shaft is not as before same  
probably due to some gradual stretching to blades of blower  
collar

New Village, N. J., Nov 25 1903

DEC 2 - 1903  
NOV 24 1903  
Letter 11-27-03  
Letter 12-13-03  
Ans 12-26-03

Orange Office  
Nov 12 1903

NOV 130 1903

DEC 10 1903

Number 408

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 23 1903

Mr. H. S. Voulton, Manager.  
On Inspectors Report of Nov. 17th,  
Item 5095 Department Bearing Inspection

Sample of oil taken from drain pipe of front intermediate bearing of chalk grinder shows grit, and babbit bearing runs warm, oil very dark - will investigate.

With all the wool used how does the grit get in?

2. Jaymz - Can this be fixed

THOMAS A. EDISON, General Manager.

Referred to Mr. Jaymz 11/15/03 for explanation. 2 Jaymz - 11-3-03

1. I think that the grit gets in the bearings through the wool packing chamber. That the wool does not close around the shaft as quick as the shaft can change its position in the bearing. The bearings have wave screws which makes it worse.

2. I think it can be by putting a rubber guard around shaft - as per accompanying sketch.  
Over

New Village, N. J., 11/26 1903

DEC 2-1903

DEC 12 1903

DEC 12 1903

11-27-03

M. S. Jaymes

[ON BACK OF PRECEDING PAGE]

this may do it but this is frequently not desirable here  
which we have been unable to stop permanently so far  
and it would soon capture others. How would soft leather do?

we will try this experiment anyway

W/Free  
12-9-03

lottery  
12-19-05

## TROUBLE INQUIRY.

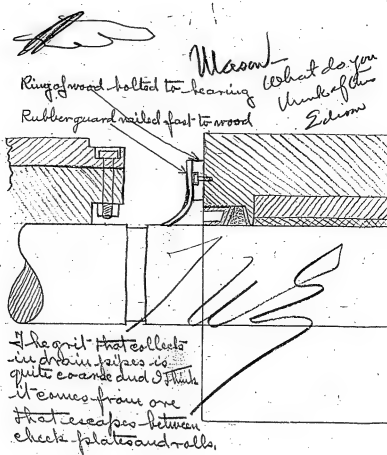
Department

Part

### Nature of Trouble

[illegible]

[ATTACHMENT]



Trouble Inquiry #408  
12/9/03

Orange office

-7-

NOV 20 1903

Number 410

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Nov 21 1903

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 17th,

Item 5100 Department Bearing Inspection

Rags left hanging on arm of bearing of right motor in #1 chamber  
S.H. #2. Barnes, who did this?

What is name of Inspector in Barnes' Dept. Who did this?

*2- Will Mr Moulton explain this man*  
*[Signature]*  
THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes, Nov 23 for explanation. Nov 23-03

*in answer to first question cannot*  
*say as I did not see the man when*  
*but it had I do not believe my inspector*  
*did it. rag was found as above*  
*after oil man had fixed the motor*  
*we still have this rag in our possession*  
*as proof*

*2 (over)*

New Village, N. J., 11/24

1903

DEC 2-1903  
NOV 24 1903

*Wm*  
*11-27-03*

*Ed Barnes*

# 2

[ON BACK OF PRECEDING PAGE]

Oil men in going into a quarry or timber  
to pack or seal a motor always bring  
all old wool and rags used. If oil  
house wool is put into a barrel and  
rags are put in box to be rewarmed.  
All oil men have been instructed to bring  
back all rags used any place on the plant  
to be burned once the used rags are

H. M. Meyer.

Oil Dept.

Dec 4<sup>th</sup> 1903

H. M. Meyer  
12-4-03

TRouble INQUIRY.

Department

Part

Nature of Trouble

*copy office*

NOV 23 1903

NOV - 2 1903

Number 411

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., NOV 23 1903

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 17th,

Item 5101 Department Bearings Inspection

Clamp holding brush in place rubs on edge of belt at head of Con.  
145. Cary, have it moved to clear belt.

1- Did man in charge know of this and did he report it?

2- Do you carry a memorandum

Book

  
THOMAS A. EDISON, General Manager.

Referred to Mr.                      for explanation.

1- Mr. Osburn reported this to me the night  
before. I neglected to have it  
attended to.

2- His Ser. Dept. don't use it as often  
as it should.  
Worton

New Village, N. J., 11-24 1903

NOV 28 1903

NOV 24 1903

Worton  
11-30-03

Worton



Orange office

DEC -2 1903 21 503  
DEC 25 1903

DEC 25 1903

Number 416

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J.,

NOV 23 1903

Mr. H. A. Goodwin, Manager.

On 102

Report of Nov 17th,

Item 9-33 Department Crusher Plant

Shut down- Lead wire to fields burned off on motor (and 102).  
Electrical system grounded in entire crusher plant.

What caused lead wire on fields of Con. 102 motor to burn off? Why did Electrical system ground? Does electrical dept. inspect their wiring system and keep insulators etc. clean?

WASIN- What do you think of the extra field wire of good insulator?

wire - see Warren & G. to him about it. THOMAS A. EDISON, General Manager.

Referred to Mr. Goodwin for explanation.

nothing out of sheet.

Referred to Mr. Goodwin 11/19/03.

Lead wire on fields did not burn off but broke off. I think vibration must have caused it to break at the place where wire enters terminal. I have put in flexible cable instead of solid wire. This will stand, it covers a good deal of vibration and bending before breaking. As for grounding of system on wet days the wire in Con. 102 and 103 was always be grounded so long as magnet wire remains and air is full of moisture. If more than 11/28 1903  
New Village, N. J.  
DEC 3 - 1903  
NOV 24 1903  
DEC 1 1903  
m such days there is a man trucking wire to keep wet dust off insulators. OVER

AM Goodwin

[ON BACK OF PRECEDING PAGE]

#2 If we are going to put in  
any rubber insulated wire to  
conveyors #102 + #103 why not put  
in all three wires with rubber  
insulation.

W. C. Warner

12/13/03

shall we adopt Warner's suggestion?

W. C. Warner

#3 -  
In the room 446's.

Yes  
J. A. E.

#3. all right it is ordered

W. C. Warner  
12-16-03

TRouble INQUIRY.

Department

Part

Nature of Trouble

*George H. H.*

NOV 20 1903

Number 117

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., NOV 20 1903

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 17th.

Item 11-11 Department Crusher Plant

Stop feed - Dryer screens clogged.

What caused Dryer screens to clog?

*[Handwritten signature]*

THOMAS A. EDISON, General Manager.

Referred to Mr. Puyno 11/21/03 for explanation.

*Box was very wet on this date and as it came over screens, would not slide over plates readily. Also clay adhering to rock made it foliary to a certain degree when we would then break on screen.*

New Village, N. J., Nov 26 1903

NOV 24 1903

*Bother*  
11-27-03

*Puyno*

*Orange office*

100-13 603

Number 224

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 24 1903

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 20th,

Item 2647 Department

Night feet of angle rubber off of belt on Con. 132. O'Brien-  
Pilling.

Did man in charge find and report this? Did O'Brien  
know of it or are the items marked "O'Brien" and then "Pilling"

Reported to Inspector by O'Brien or are words "O'Brien", "Pilling"  
added in office? Please tell Inspector to use word "Reported by"  
when item is given him.

  
THOMAS A. EDISON, General Manager.

Referred to Mr. Payne 11 30 12 for explanation.

O'Brien discovered and reported it to me.

New Village, N. J., 12 11 1903

copy  
12-10-03

M. S. Lawrence  
11

Number \_\_\_\_\_

## TROUBLE INQUIRY.

**Edison Portland Cement Company.**

Orange, N. J., \_\_\_\_\_

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 21st

Item 2656-2657 Department                     

~~XX~~

2656- Cheek plates are worn on cheek grinder. Dills, have we a lot of spores?

~~2657 -~~ Cheek plates are worn on clinker grinder #2. Dills, note.

Mr. Moulton, please read these items. The system of

~~keeping account of spares should make it unnecessary to ask the~~

Assistant Master Mechanic if there was any answer.

THOMAS A. EDISON, General Manager.

Referred to Mr. Mohd. Ali - 11/28/03 for explanation.

Your argument is logical. At the time Mr. Masons awarded the above mentioned \$100.00 to the Span Park Record, so far as securing proof of giving Mr. Masons the information he wanted at this time goes, I am satisfied, and it was not available because we had not had time to complete the record, we have not been able to complete the record of Span party up to this time as a result of the fact that the Span party taking these taken direct from shop and applied it with, without having given the required notice to Stockholders, we are now in position of tracing all such matters so as to perfect the Span Park Record and making the necessary provision for similar stock.

New Village, N. J., November 26th 1902

*N. J. Henderson*

*Orange office*

11-15 1903

Number 466

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Mr. H. S. Moulton, Manager. Orange, N. J., Dec. 12, 1903

On Inspectors Report of Nov. 21st,

Item 2659- Department

Gears (inside of gummy chamber) driving Elev. #2 are very dry.  
Barnes.

Does Mr. Moulton think these gears should remain open and  
be neglected or closed and self oiled? There are many reports of  
dry gears.

~~If they are not covered with oil~~  
~~Will they be?~~  
*W.B.*  
THOMAS A. EDISON, General Manager.

Referred to Mr.  for explanation.

*We are going to make gear cases as  
soon as possible but at present we are  
fixing up more important ones.  
Rooster drives &  
The other gears are in a gummy chamber  
& have a light coat.*

New Village, N. J., 12-5-1903  
*W.H.M.*

*Original*

DEC - 8 1903

Number 465

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., NOV 25 1903

Mr. H. S. Moulton, Manager.  
On Inspectors Report of Nov. 21st,  
Item 5134 Department  
One flight broken, and one flight and brace badly bent on Con. 113.  
Huffman, repair.

Was this known and reported by man in charge?

*I always supposed [unclear] was a  
man in charge of Blower  
houses - who takes care of this  
floor*  
THOMAS A. EDISON, General Manager.

Referred to Mr. Pugmire 1130-03 for explanation *2. Pugmire - Head  
of [unclear] [unclear]  
[unclear] [unclear] [unclear] [unclear]  
[unclear] [unclear] [unclear] [unclear]  
12-8-03*

*This was reported by day foreman to Master  
Mechanics and then Inspector's attention was called to it.  
We have no man on this floor.*

*2- Foreman look after bearings and scraper  
conveyors.  
Instructions call for man on this floor to also  
look after second. But as yet we have not  
been able to have him take care of second as*

New Village, N. J., DEC 1 - 1903  
*W.H.H.  
12-5-03* *Pugmire.*

[ON BACK OF PRECEDING PAGE]

so much time has been needed to keep feet pipes  
clear-

Pinger.

12-10-03

W.H.W.  
12-10-03

**TROUBLE INQUIRY.**

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



*Sample file*

DEC - 15 1903

DEC 11 1903

Number 469

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Mr. H. S. Moulton, Orange, N. J., Nov 25 1903  
Manager.  
On Log Report of Nov. 22nd,  
Item 1-10 A.M. Department Roaster Plant  
Shut down on account of breaking off coal ring in roaster.

- 1- What is breaking coal rings *JK*
- 2- I was told new bars this ring & kept it down

THOMAS A. EDISON, General Manager.

Referred to Mr. Raden - 11-22-03 for explanation. 2 Raden 12-5-03

- 1- Coal rings (so called by the burner) is a formation of fine clinkers, at a point immediately outside the clinker heat, which accumulates to such proportions as to prevent clinkers to roll out of kiln freely. This is hard and can not be broken out while heat is in, and kiln is running.
- 2- They do have this down to a certain extent that is to say so long that they are able to cover
- New Village, N. J., 12-2-1903 *W.H.H. 12-5-03* OK Raden.

DEC 8 - 1903

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

To break it off, Roasters have been shut down so often as to give us a very good chance to clean this coal ring off. During shut down, when no mention was made concerning this, On this occasion film was worn very much in heating, fire, and very little coating on, and a high coal ring. Chalk was forming into balls very much and rolling around behind this coal ring and kept the film from coating while coal ring was on.

W. H. H. H.  
11-10-03

12-9-03

W. H. H. H.

Orange Office

DEC - 3 1903

Number 471

# TROUBLE INQUIRY.

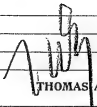
Edison Portland Cement Company.

Orange, N. J., NOV 25 1903

Mr. H.S. Moulton, Manager.  
On Log Report of Nov. 21st,

Item 8-52 Department Crusher Plant  
Shut down - Wire cable broken on flexible coupling, 3d set 36" rolls,  
mechanists repairing.

Why did the flexible ropes on wobbler have such a short  
life as compared to previous ones? This short life would appear  
to be due to neglect somewhere. Two hours and 48 minutes seems a  
long time to make change.



THOMAS A. EDISON, General Manager.

Referred to Mr. Little 11-30-03 for explanation.

The reason for the short life of this rope  
was because rollers on coupling became stuck on their  
pins & could not revolve. Another reason was  
because of the backing of being backing past the  
roller of the 11-30-03 & piece of casting going  
through roller. It was to be cable to deliver the rope  
on changing this rope but they are quite incommen-  
to handle

New Village, N. J., Dec 28 1903

WHL  
12-1-03

A. M. B. L. K.

Orange Office

11-15-03

Number 472

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., NOV 21 1903

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 21st,

Item 12-12 Department Crusher Plant

Cars stuck in switch at foot of incline.

Can this sticking of cars at foot of incline be fixed?

It was stated some time ago that it was fixed. This is going to be serious this winter.

THOMAS A. EDISON, General Manager.

Referred to Mr. Piquet 11-30-03 for explanation.

We have been using a different oil for a few days past. So far have not had any trouble with cars sticking.

New Village, N. J., Dec - 1 1903

WHL  
12-3-03

Piquet

Orange Office

DEC - 15 1903

Number 477

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 23rd,

Item 7-00 Department Crusher Plant

Waiting for rock. Lost 20 minutes. Night Watchman failed to have steam on shovel - lost 25 minutes, throwing out dirt and picking clean rock.

What excuse has Night Watchman for not having steam up in shovel?

  
THOMAS A. EDISON, General Manager.

Referred to Mr. Smith 11-30-03 for explanation.

Watchman says wind was wrong could not get up steam & changed the wind for him and it had been all right since

New Village, N. J., L. Smith 1903

10444  
12-3-03

(This irregularity was observed by me, aft Smith's caution against repetition. H.S. 12/6/03)

NOV 20 1903

Company Office

DEC - 15 1903

DEC 14 1903

Number 478

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

Mr. H. S. Moulton,

Manager.

On Log

Report of Nov. 23rd,

Item 8-44

Department Crusher Plant

Shut down - Large rock stopped one roll, taking rock from rolls (Giants)

109 minutes is a long time to chain or dog a rock and get

1- it out. 15 minutes was average at Edison. You have hand hoist made for this purpose. Why did it take so long? Was it inexperience?

Why did it stop roll?

2- We had all this afternoon & yet our average time was 15 minutes  
THOMAS A. EDISON General Manager.

Referred to Mr. Piquin

for explanation. Piquin - 12-5-03

Large rock struck first roll starting same, and causing other rocks to fall on or large one making it necessary to remove part of a ship load of rock.

1- Large rock was wedged against rear of hopper in such a manner that shipper plates could not strike and break rock.

2- I can not see how this could have been done in any less time as men were doing all

New Village, N. J., Dec. 1

1903

Piquin.

DEC 8 - 1903  
NOV 28 1903

[ON BACK OF PRECEDING PAGE]

they could to get mill running again.  
Bingm.

10/10/25  
2-10-25

**TROUBLE INQUIRY.**

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Orange, N. J.*

11-5 34

Number 479

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 27 1903

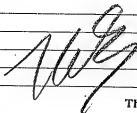
Mr. H. S. Woulton, Manager.

On 10-33 Report of Nov. 23rd.

Item 10-33 Department Crusher Plant

Waiting for speed, giant rolls would not start.

Why would not Giant rolls start?



THOMAS A. EDISON, General Manager.

Referred to Mr. Pugs - 11-30-03 for explanation.

Friction on rolls would not start roll on  
account of belicanut supplied under stone  
where roll stopped revolving.  
This immediately follows time when large  
rock was wedged in between

New Village, N. J., Dec-1 1903

10TH  
12-5-03

Pugs

NOV 28 1903



Orange N.J.

DEC -13 1903

Number 485

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., NOV 27 1903

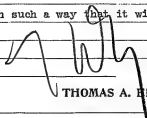
Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 23rd,

Item 2693 Department

Chute from one blower in blower house #2 choked this morning by cloth, wood, rubber, a piece of iron used on old man, and a cape chisel. Dites, take precautions, as directed, against this happening again.

Who is responsible? You will always have this trouble without men are warned in such a way that it will cling to their memories.



THOMAS A. EDISON, General Manager.

Referred to Mr. Little - 11-30-03 for explanation.

Dites is responsible + has warned him more on this topic + instructed them with proper precautions in all parts of material + repeated the same job twice without changing any thing about it.

New Village, N. J., DEC 1 1903

LOTHAN  
12-1-03

M. B. Smith

NOV 28 1903

Orange office

DEC - 15 1903

Number 486

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J.,

NOV 27 1903

Mr. E. S. Moulton, Manager.

On Inspectors Report of Nov. 23rd,

Item 2681 Department

Nut not wired on one stud supporting brush holder on motor driving  
Con. 113. Barnes.

Is Mr. Barnes keeping record on his inspectors to spot  
those incompetent? I suppose inspectors are told to notice if every  
thing that should be wired is wired. If an inspector habitually  
neglects or fails to note these little things, he is a hopeless case  
and it's time a better man was given a chance.

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes 11/26-23 for explanation.

Last week or about the date  
this motor went to the head to alter  
due to commutator <sup>insulator</sup> being dry that the mag  
man omitted to wire stud nut  
you say are keeping record of  
most trouble are due to one man  
whom he has discharged

New Village, N. J., 12.2

1903

10/11/03  
12-3-103

W. Barnes

NOV 28 1903

Orange office

DEC - 5 1903

ALL 24 1903

Number 490

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., NOV 27 1903

Mr. H. S. Moulton, Manager.  
On Inspector's Report of Nov. 23rd,  
Item 2687 Department Angle rubber on belt of Con. #147 wears on guide boards.

How long has this been going on? Who should have found

1- it, men in charge or Belt Department men? Should not Belt  
dept. have found this?

2- Jayne = This is one on you

THOMAS A. EDISON, General Manager.

Referred to Mr. Pilling 11-30-03 for explanation. 2- Jayne 12-5-03

I should say that this has been going on  
ever since the guide boards were first put on.  
This item should have read "has been wearing on  
1- guide boards" as it had worn a clear path and  
did not show "wear". An order was in the  
Carpenters hands for new guide boards at the  
time of this report.

12/10/03  
2- Pilling evidently wore on boards since they were first  
put on, and is one of many cases, but at the time I saw it  
Pilling was wearing on boards and Pilling is a reasonable  
man to know what took place while he was examining it.

New Village, N. J., DEC 1 1903

DEC 8 - 1903  
NOV 28 1903

11-3-03  
12-10-03

0 Filling

copy of file

DEC - 7 1903

Number 495

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., DEC - 7 1903

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 25th,

Item 5164 Department Oil & Bearing

Six oil cups off of wheels on Elev. #2; 2 on right, 4 on left side.  
Hoyer, replace cups, and apply oil.

These oil cups are constantly reported as coming off. What makes them come off? Find the cause and remedy it. This cannot go on forever.

THOMAS A. EDISON, General Manager.

So Thomas Edison Dec-2-03  
Referred to Mr. Kelly 12-3-03 for explanation.

one Reason is the triangular plate which holds wheel on has two screws in one  $\frac{1}{2}$ " and  $\frac{1}{4}$ " locked together in some cases the  $\frac{1}{4}$ " screws have broken off the triangular plate then swings round with the rotation of the wheel acting like a Lever Breaks the nut off. Another Reason it is possible for these cups to strike bolts in track in one or two places which will be removed at first opportunity which I suppose had better be soon.

New Village, N. J., DEC 4 1903

AKH  
12-4-03

DEC 2 - 1903

*Saving Office*

DEL 38 2013

Number 503

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J.,

Nov - 7 1903

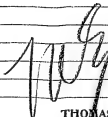
Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 24th,

Item 2700 Department

Several bolts loose in couplings on hand wheel shaft operating Con. 116. Rader.

Was man in charge aware of this?



THOMAS A. EDISON, General Manager.

To Mr. Mason Dec 2-03

Referred to Mr. Rader - 12-3-03 for explanation.

*No Sir, Man in charge was not aware of this. Simply because he was not instructed on this one particular point (Hand wheel shaft) but some men never do see any more than what you point at for them. This was due to Foreman and myself not giving complete instructions which left man in charge ignorant as to duty.*

*Same old trouble*

New Village, N. J.,

12-14

1903

*G. H. H. 12-16-03*

*Rader*

Charge Office

DEC - 9 1903

DEC 11 1903

Number 508

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 26th,

Item 8-40 Department Weighing Plant

Putting on new gear motor drive Con. 105, broken by bolt getting out of collar on pinion shaft and catching in teeth.

1 Why did bolt get out of collar on pinion shaft? Was it locked?

2 Are these bolts generally locked  
are we liable to have more of this  
trouble —

THOMAS A. EDISON, General Manager.

In Mr. Mason Dec 2-03

Referred to Mr. Huffman - 12-3-03

for explanation. 2 bolts

12/14/03

1 This bolt was not locked

2 These bolts are not only generally locked but are supposed to always be locked. This was not properly done or not done at all when Brillwaght changed this drive from original to Orange drive Early last summer. I am of the opinion that there are very few if any others of this kind. I am not a trained people attended but cannot say more without taking lots of all gear cases on such drives

Result DEC 14-03

New Village, N. J.,

12-4-1903

W.H.H.  
12-7-03

W.H.H.  
12-14-03

J. H. Huffman

FC 11 1903  
DEC 2 - 1903

Orange office

DEC - 7 1903

Number 511

## TROUBLE INQUIRY.

Edison Portland Cement Company.

DEC - 7 1903

Orange, N. J.,

Mr. H. S. Moulton, Manager.  
On Log Report of Nov. 24th,  
Item 6-00 A.M. Department Roaster Plant.  
Not running - Putting new brushes on motor driving roaster.

Will Mr. Warren investigate and report why motor on  
roaster should be the ones that require incessant cleaning of  
commutator?

THOMAS A. EDISON, General Manager.

To Mr. Mason Dec 2-03

Referred to Mr. Warren 12-3-03 for explanation.

Due to copper wearing away  
faster than mica. This keeps  
the brushes out of contact with  
copper + causes sparking.  
These motors carry a heavier load  
than most of the 25-HP motors  
in the plant + they carry it  
24 hours per day.  
There has been no trouble with  
these motors since mica has

New Village, N. J., 12/4

190 3

Office  
12-4-03

W. A. Warren

DEC 2-1903

(over)

[ON BACK OF PRECEDING PAGE]

been scraped down below  
bars on Nov 26 + 27.

## TROUBLE INQUIRY

Department

part

### Nature of Trouble

[illegible]

(مستخرج)



copy office

DEC-4 1903 DEC-15 1903 Number 516

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., DEC-4 1903

Mr. H.S. Moulton, Manager.

On Inspectors Report of Nov. 27th,

Item 2752 Department

Lacing has started to break in belt on Con. 137. Pilling.

- 1- Has man in charge been told to look out and report such things?
- 2- Mason - Has Pilling enough men to attend to things promptly?

THOMAS A. EDISON, General Manager.

Referred to Mr. Brown - 12-3-03 for explanation.

- 1- The Man in Charge told me about it and I reported it to Pilling. It is remaining that way now as Pilling claims he has not had a chance to fix it.
- 2- Yes I think so and he has the privilege of calling for machinery & repairs to such dept in which he is working. This was not a case of men but of getting machinery shut down long enough to do the work.

New Village, N. J., Dec 6 1903

W.H.M. 12-7-03 J.W.B. 12-13-03

DEC 11 1903  
DEC 2 - 1903

Orange office

DEC 16 1903

518

Number

DEC - 7 1903

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 27th,

Item 2755 Department

Fields and armature of motor driving Con. 132 are very dirty.  
Barnes, clean out at noon hours.

1- Who is responsible?

2- Cannot be done by Dept out of  
Chamber - where does it get in

THOMAS A. EDISON, General Manager.

See memo Dec-2-03

Referred to Mr. Barnes 12-3-03 for explanation. 2 Barnes 1125-03

- Barnes
- one find it next to impossible  
to clean the 50 horse motor with  
air hoses we are getting in compressed  
air into 109, 110. tried it with hose  
found it impossible. OK wish we could  
change it through the whole mill to  
clean up with
  - In order to keep things clean and I mean  
necessary to put in two fans the same

New Village, N. J.,

1903

DEC 8-1903

DEC 2-1903

W.H.W.  
12-4-03

W.H.W.  
12-4-03

W.H.W.

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

# 2, Continued.

blow in the displacement of air  
this leads the gunns with dust and  
under me clean up chamber. Control air  
to in this case since earlier the fire float is  
blown into chamber since we have  
compressed air in 109, 110 we use  
same to blow dust outwards which  
works better do not do this every day  
but about twice weekly this keeps gunns  
and motor in good condition  
Born

2nd Reply

12.14.08

Orange Office

DEC -7 1903

DEC 16 1903

Number 519

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J.,

Mr. H.S. Moulton, Manager.

On Report of Nov. 27th,

Item 2756 Department  
Fields and armature of motor driving Elev. #2 are very dirty.  
Barnes.

- Who is responsible?
- Is gunny chamber large enough - How do we dust get in

THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes - 12-1-03 for explanation. 2 Barnes 12-F-03

- This case is same as that 518 we do  
app best to clean with air ducts  
but find it a very different matter.  
Cause Compens - air
- Gunny Chamber fills all available space slightly  
hinders air, don't get air across - major  
we have had a bit of trouble with the fan  
in this chamber when fan stops dust comes in  
through fan of ours and get it fixed soon

New Village, N. J., 12-4

1903

DEC 8-1903  
DEC 2-1903

W.H. 12-4-03  
W.H. 12-4-03

all Barnes

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

#2 Continued-

possible the most dust comes through the  
gunner the elevator is about the distance  
play on the Plant and under the ammunition  
and air refers into this chamber will be  
loaded with fine float dust we take every  
opportunity to clean up this motor & blow out  
field's ammunition with air ducts but find the  
is not powerful enough we hope have motor  
ordered for this for a plant will be more convenient  
to clean up. How about extra space needed  
Barney 2nd Air

12.14.03

Orange office

46-9 503

46 51 503

Number 521

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

DEC - 1 1903

Mr. H. S. Moulton, Manager.

On Inspector's Report of Nov. 27th,

Item 2751 Department Put off of one bolt in top of rear left column of Elev. 22<sup>nd</sup> floor.  
Rufman, replace.

- 1- Was this known to men in charge?
- 2- Is the duties of man at elevator such  
that he has no time to look around &  
find such things?

THOMAS A. EDISON, General Manager.

See Mr. Mason Dec-2-03

Referred to Mr. Edison - 12-5-03 for explanation. E. Edison 12/1/03

- 1- it was not
- 2- He has neglected to look and find these things  
and I have told the men time and again  
about looking for these things I have told  
him if he does not do better I don't want him  
this place is a very bad place as it is a  
regular air shaft for dust and again he has a  
bearing on Ratchet shaft that gets hot and it  
takes a good deal of his time to figure out these  
things

New Village, N. J., Dec 6 190

Edison  
12-7-03

Edison  
12-15-03

But these don't  
seem to help  
this is to be changed on new design

DEC 11 1903  
DEC 2 - 1903

Number 529

# TROUBLE INQUIRY.

Edison Portland Cement Company.

REC-1 3003

Orange, N. J.,

Mr. H. S. Sullivan

Manager.

On Inspector's Report of Nov. 26th

Item 2739

Department

One bolt out of rear ~~tail~~ <sup>spicing</sup> roll retaining collar of  
clinker grinder #1. Philip. Bureau.

What does it mean to these bolts, does he merely tighten  
them or take measures to stop them from coming loose? Without  
something is done, this will apparently go on forever.

THOMAS A. EDISON, General Manager.

To Mr. Mason Dec-3-03

Referred to Mr. Huffman 12-3-03 for explanation.

Read flange off of this bolt which  
has occurred several times since securing  
note by inspection.

I don't know just what to do about this bolt. on the roller  
a plan was suggested to cut out all these rollers on future rollers  
but it doesn't help these on. there is no room for a larger bolt  
would you advise bolts of a different material

New Village, N. J., 12-7-03

1903

Edison  
12-7-03

Huffman

REC 2-1903

Orange office

DEC -9 1903

DEC 11 1903

Number 580

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., DEC -1 1903

Mr. H.S. Houlton, Manager.

On Inspectors Report of Nov. 26th,

Item 2740 Department

Packing gland has worked partly out of rear left bearing of clinker grinder #1. J. Willis. Moyer.

What does Huffman do to these bolts, does he merely tighten

1. them or take measures to stop them from coming loose? Without something is done, this will apparently go on forever.

2. Can cotton pins be put in that will not be liable to shear

THOMAS A. EDISON, General Manager.

To Mr. Houlton Dec 2-03

Referred to Mr. Huffman 12-2-03 for explanation. J. Moyer 12/11/03

1. There are no H-t's on this bearing gland, cotton pins sheared off

2. On Nov 26<sup>th</sup> Ring was replaced and bolt drilled for 3/4" cotton pin. Since trouble didn't until break of shaft  
Dec 15<sup>th</sup> 1903 Dec 17 1903  
W. H. Lipp

New Village, N. J., 12 - 4

190-3

W. H. Lipp  
12-7-03

W. H. Lipp  
12-15-03

J. H. Houlton

DEC 11 1903

DEC 2 - 1903



Orange office

DEC - 2 1903

Number 535

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

DEC - 1 1903

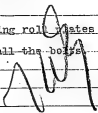
Mr. H. S. Moulton, Manager.

On Log Report of Nov. 27th,

Item 7-54 Department Clinker Pine Grinder

Shut down - Motor driving Con. 140 sparking badly. Electricians  
assumed to stop motor. Waiting for machinists to tighten up loose  
plate bolts on grinder.

Who is responsible for making roll plates with such a  
bad fit to mendril that they loosen all the bolts. This is a job  
for a good machinist.



THOMAS A. EDISON, General Manager.

Referred to Mr. Getto 112-3-03 for explanation.

These plates are tested each one as if come  
from the Planes + we find them to be not slack in  
the center which is just as good as is possible to do on our  
planes (which is the reason the other man parted with  
said machine) this machine + job is being or being  
handled by a first class machinist. I am responsible  
for this job + will see that all plates are changed  
to a perfect fit in the future

New Village, N. J.,

Dec 4th

1903

W.H.W.  
12-4-03

Amisette

Orange Office

DEC 15 1903

Number 536

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., DEC - 1 1903

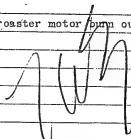
Mr. E. S. Moulton, Manager.

On Dec Report of Nov. 26th.

Item 10-15 Department Roaster Plant

Shut down - Fuse on roaster burnt out.

Why did fuse on roaster motor burn out?



THOMAS A. EDISON, General Manager.

See memo Dec-2-03

Referred to Mr. Cord 12-3-03 for explanation.

The heavy load on roaster is starting up at slow speed, did not shift as it does when hot and as it raised as roaster turned, drew too much current and blew fuse. If they had started it more rapidly the increasing speed would have generated more e.m.f. and kept current down and saved the fuse.

New Village, N. J., 12/10 1903

Lothman  
12/13-03

B. H. Goodwin

DEC 2-1903

Orange Office

DEC - 17 1903

Number 537

## TROUBLE INQUIRY.

Edison Portland Cement Company.

NFC - 1 3003

Orange, N. J.,

Mr. H. S. Moulton, Manager.  
On Log Report of Nov. 26th,  
Item 4-55 A.M. Department Roaster Plant  
Shut down - Cleaning armature on roaster motor.

Why are armatures on Roaster motor required to be cleaned so often? Is it armatures or commutators? Can anything be done to stop these continuous troubles with kiln motors, or must it go right on forever?

THOMAS A. EDISON, General Manager.

2-11-1903

Referred to Mr. Brown - Chief Engineer for explanation.

Commutator, not Armature

After scraping out mica between segments, these motors don't spark but they still have some run clean. Once Com is made, placed and in a running condition the slight sparking is due to copper coating on end of brushes and though the new brushes will not remove the fault but remove so from the Com.

New Village, N. J., 12-14

1903

2-11-1903

More Motion this Com to be the Cause

DEC 2 - 1903

*copy office*

DEC - 7 1903

DEC 10 1903

Number 541

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., DEC - 1 1903

Mr. H. S. Moulton, Manager.  
On Log Report of Nov. 25th,  
Item 9-00 Department Chalk Plant  
Shut down - Electricians filing commutator of motor Con. 109 (Motor  
Dept. sandpapering commutator of motor Con. 113.)

What is the nature of the work under the item "sandpapering commutator"? Are skilled men doing the job, or anybody? I have seen commutator coppers gotten all out of true by inepters doing a lot of sandpapering, so that armature had finally to be taken out and

trued up.  
2. Mason are the men in Electrical Dept. competent to file a commutator  
THOMAS A. EDISON, General Manager.

To Mr. Mason Dec 2-13  
Referred to Mr. Baron 12-3-23 for explanation.

*The work in the case of the commutator done under the supervision of the Electric Dept. The Com - at 109 had become so badly damaged it was necessary to file down the copper ridges in order to get Com in good shape. This sanding of Com's done both by Electricians and by inspectors it depends on the exigencies of the work and how busy the Electrical Dept are at times. Usually every seven hours we have one or more*

New Village, N. J., 12-4 1903  
W.H.M. Baron over  
12-4-23

DEC. 8 - 1903  
DEC 2 - 1903

2 - answer on reverse side of this sheet.

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

#1 Continued -

Motors to clean up I attempt to this  
month personally, when possible but sometimes  
I have to trust to my men particularly as I  
now have several Motors to clean up and  
one thing we would very much prefer that  
the Expert Electrical Men and the Work  
Men I thought a lot of work on these  
Machines not intended but should do but  
an object has been always to lend all assistance  
possible to keep the Mill running

#2- The excitement was filled by a machinist from machine  
Shop.

September.  
12-9-03

*Amplified*

DEC - 7 1903

DEC 11 1903

Number 546

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., DEC - 1 1903

Mr. H. S. Moulton, Manager.

On Log Report of Nov. 28th,

Item 9-54 Department Chalk Plant

Shut down- Bearing run hot on flexible coupling shaft motor Con.  
110, left bearing.

- 1- What was cause bearing on flexible drive Con. 110 running  
hot?
- 2- Oil hardened oil chains  
used for renewals

THOMAS A. EDISON, General Manager.

To Mr. Messrs Dec 2-03

Referred to Mr. Moyer 12-3-03 for explanation. 12-5-03

- 1- On Nov 18<sup>th</sup> the oil chains in each of these  
two bearings were in two and round bearings  
to heat. The cups were scraped out and fitting  
and found no more trouble until Nov 20<sup>th</sup> when  
rolls first showed up and kept shut down on it  
for some time until up the road was then repaired  
at Rocker on same date and larger rollers put  
in place of oil in oil wells and closed

New Village, N. J., Dec 4<sup>th</sup> 1903

DEC 8 - 1903 12-4-03

DEC 3 - 1903 #2. see renew letter

M. O. Moyer  
Oil Dept

[ON BACK OF PRECEDING PAGE]

#2- Gas air chains and  
rivets are casehardened when  
removed

TH M Moyer  
Del. Sept

Dec 15<sup>th</sup> 1903

W. H. Moyer  
12-10-03

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

Orange N.J.

DEC - 11 1903

Number 550

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., DEC - 1 1903

Mr. H. S. Moulton, Manager.  
On Inspectors Report of Nov. 30th,

Item 5152 Department  
Filter cups on main shaft in clinker fine grinder house have no wool in them. Hoyer, put wool in.

- 1- Why was there no wool in filter cups?
- 2- Did you ever try bad oil? - We did here

THOMAS A. EDISON, General Manager.

John Mason Dec 5-03  
Referred to Mr. for explanation.

- 1- We had a lot of trouble getting the ~~oil~~ <sup>oil</sup> through the filter cups last winter during the cold weather and at that time I think the wool was removed. There is a very fine gauge screen in the cups and I don't think the wool amounts to much one way or the other.
- 2- We never tried our fine mill oil all filter cups were washed out and some put in clean and washed up on Dec 1st 1903

New Village, N. J., 12-7 1903 all right Dec 16th, 03

Amos Sam wrong  
12-7-03

DEC 11 1903  
DEC 5 - 1903



Brady office.

61-13-1003

Number 504

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., DEC -4 1903

Mr. H. S. Moulton, Manager.

On Inspectors Report of Nov. 30th,

Item 2781 Department Large gear on cooler #1 meshes too deep. Human, shim up friction wheels, Emergency.

Who is responsible for setting it too deep?

*TAG*

THOMAS A. EDISON, General Manager.

*So the machine Dec-5-03*

Referred to Mr. \_\_\_\_\_ for explanation.

*I cannot say who is responsible for setting gear too deep. It has not been changed to my knowledge for some time. I think it was not right originally but that there has been a good many friction wheels changed there has been some wear on supporting rings and supporting ring at one end has to be left alone so to avoid breaking it, which has already happened there. any of them might be the cause of the deep meshing*

New Village, N. J., 12-7-1903

*W H Mason*

DEC 5-1903

*Engineering*

DEC 18 1903

File No. 556

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., DEC - 4 '03

Mr. H. S. Moulton, Manager.

On Nov. 30th, Report of C. Blank

Item 2789-2788-2790 Department \_\_\_\_\_  
2789-Motor driving skip hoist is dirty. Barnes, these have been shut down. Why are they not cleaned up?  
2788-Motor driving giant feed roll is dirty. Barnes, these have been shut down. Why are they not cleaned up?  
2790-Motor driving Con. 101 is dirty. Barnes, these have been shut down. Why are they not cleaned up?

1- What has Barnes to say about this?

2- If a mill is shut down the particular inspector would have very little to do. *[Signature]*  
THOMAS A. EDISON, General Manager.  
These motors, I cannot comprehend this answer at all.  
Referred to Mr. Barnes - 12-5-03 for explanation. 2 Barnes 12-5-03

1. *Ans Motors Inspector don't. his time to motor that as running and should clean up these Motors as first add after starting to run.*
2. *The Inspector always cleans Motors during spare time also an Inspector calls the fact that these Motors were shut down and a not down with person that he had plenty of spare time this would shut down the shafts last*

New Village, N. J., 12.14

1903

*Over*

*CCM  
H-H-03*

DEC 18 1903

DEC 5 - 1903

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department
Part
Nature of Trouble

weigh house & rock stock to attend to  
and when the whole is running it  
more than any man can tend to properly  
and we have to add assistance sometimes  
however I looked at these notes at the  
time and found the matter was not  
serious

W.H.M. Barnes 1.14.04  
1-14-04

Chas. Miskel  
Barnes

Orange office

Number 562

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

Mr. W. S. Moulton, Manager.

On Log Report of Nov. 30th,

Item 7-26 Department Clinker Fine Grinder  
Shut down - Motor of Elev. 131 blew fuse.

What is cause of motor of No. 2 Elevator blowing fuse  
so many times? What was found wrong with fields? Was motor tested  
in shop before putting up?

THOMAS A. EDISON, General Manager.

Referred to Mr. Quanderwell 12-5-03 for explanation.

The motor frame was not changed.  
at field coils from shop were put in place of  
impaired coils and another armature was put in.  
No motor could not be started except in position.  
one field coil was found to be reversed  
and connections on it had to be transferred.  
Fuse blew on account of excessive armature  
current due to the weak field.

New Village, N. J., 12/11 1903

copy  
12-15-03

R. H. Goodrich

DEC 3 - 1903

Orange office

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Dec 12 1903

Mr. H. S. Moulton, Manager.  
On Log Report of Dec. 2nd,  
Item 5-49 Department Clinker Grinder.  
Shut down- Small pulley slipped on shaft that drives governor for feedrolls.

Why did small pulley slip on shaft that drives governor rolls? Is it fastened with set screw?

*If pulley has metal hub + pressure  
discussed to have replaced at job  
Loose*

THOMAS A. EDISON, General Manager.

Referred to Mr. Dicks - 12903 for explanation. Dec 12-16-03

*this is a new one  
+ because last time it was broken  
the extra work required on the shaft is very  
heavy work requiring Pulley on the shaft  
it they are damaged + not satisfactory*

2. *this being a old wood pulley has the metal hub  
but is split + secured to the shaft by clamping with  
bolts through hub each side of shaft above on in use on line  
shaft is almost any shaft or mill are made by 3/8 edge while the clamping  
bolts are occasionally dropped to slip but as a rule give no trouble*

New Village, N. J., Dec 11 190 3

DEC 16 1903  
DEC 9 1903

*W.H. 12-15-03  
12-19-03  
12-16-03  
12-16-03*

1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 26

Number 528

## TROUBLE INQUIRY.

**Edison Portland Cement Company.**

Orange, N. J., \_\_\_\_\_

Mr. H. S. Boulton Manager

On \_\_\_\_\_ Inspectors \_\_\_\_\_ Report of \_\_\_\_\_ Dec. 2nd

Item 2818- Department                       
Motor driving elevator #2 is very dirty. Barnes, clean

Those fault?

THOMAS A. EDISON, General Manager.

Referred to Mr. Bonus - 12-9-03 for explanation.

I have tried to give a reason for this but  
on sheet #578, you can I say whose fault,  
did not the rubber dash condition exist  
in the elevator why would have no trouble  
in keeping Chamber & Case would recommend  
that elevators be insulated with concrete  
lined frames from bottom to top also put in  
compressed air to the chamber with concrete  
at the several floors so we can blow air all  
the better.

1903

New Village, N. J., 12.14

New Village, N. J.,

1903

DEC 9-1964

Inventory

DEC 12 1903

Number 502

## TROUBLE INQUIRY.

Edison Portland Cement Company.

REL - 8 1903

Orange, N. J.,

Mr. H. S. Moulton,

Manager.

On Log

Report of

Dec. 6th,

Item 2-07

Department

Crusher Plant

Shut down- Head pulley slipped conveyor No. 103. Trying to start belt by stepping on it.

Belt slipped on 103 after it was taken up. Why?

- 2- All of my experience runs counter to the taking out of so much belt, there is something wrong somewhere.

THOMAS A. EDISON, General Manager.

do Mr. Moulton Dec 9-03 12/10/03  
Referred to Mr. Pilling 12-10-03

for explanation. 2 Pilling

- 1- Because it had not had enough taken out to offset the expansion that was taking place with the extreme heat from the furnaces. It was taken up 6 times in 6 days, before we got it settled down to proper shape.
- 2- We have searched for "something wrong" and cannot find it. The belt has had 2 1/2" taken out altogether, 104 along side, has had 9 1/2" taken out. But I understand that this belt had had a lot taken out before. However 103 has run all right all this week. and all indications point to the fact that the extreme heat was the cause.

New Village, N. J.,

1903

Dec 11

Dec 19

DEC 16 1903

DEC 9 - 1903

Stewartsville N.J. 12/19/03

Mr. Thomas R. Edison.

Mr. Mason

Please note contents of

Orange N.J. this letter is returning and  
take heed that this Edition of ~~offense~~  
will be changed.

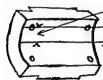
Thos. A. Edison

Dear Sir

The troubles with the roll plates are the following, the only defect that I can see in the design is that the bolt heads should be larger in diameter is now being done. Nearly all of the troubles with roll plates can be traced to poor workmanship such as heads of bolts not fitting counterbore in plates, Improper locking of bolts, dirt between plates and arbors, dirt between heads of bolts and plates, dirt between nuts and arbor, Nuts upsidside down and not square, Plates flamed from .001" to .005" out of true, Holes drilled from 0 to  $\frac{1}{16}$ " out of line with center line of plates. The defects are not always present but have occurred several times in our last run. There is often too much time spent in replacing broken plates and assembling a new set of plates and rolls. Usually the broken plates and bolts, I find at noon. I have twenty minutes to inspect Chalk and Chimer grinders when I find any thing wrong I report it to the foreman in charge as I don't have time to report it to Mr. Mason or Mechanical Dept. The foreman in charge sends a messenger to the Chief of repairs, it requires sometimes twenty minutes to find them as they may be looking after a job some where else, they then send a man to repair the defect, the man does not always know the nature of the trouble and where he gets to the rolls, he finds he does not



Have the necessary tools with him, he will then go back to the shop, get the proper tools, and start on the job. quite often, there is no one to see what he is doing and this is usually when the burn work is done. While this work is being done, I inspect the parts of the plant that I cannot get at when running. The above time lost does not always occur, but has occurred. Some time ago Mr. Huffman told me that he would have two men at each grinder at noon to repair defects, this I think a very good idea, but it has not been carried out except for one day. They now have a small box at each grinder with some tools in it to repair roll plates, these boxes are not locked and are convenient for mill men to help themselves to tools. There has been time lost <sup>side of</sup> by plates touching each other, when this occurs plates are taken back to shop and ground off if not much is to come off it is done by chiseling them at rolls. The tools are not kept up in good order and there is not enough of them. Last Thursday there was plates being put on Chalk and Chinker grinders at the same time, there was two machinist and helpers working on Chalk grinder and had only one wrench, some of the time man on one roll had to wait for the wrench. The heads of several plate bolts have broken on Chinker grinder. This may be due to screwing them up too tight, but I think it is due to holes in plates not being drilled in line with center line of plates. If the holes in plates are



from 0 to  $\frac{1}{16}$ " variation } a little out of line it will not prevent plate having a proper bearing on arbor, because holes in plates are larger than bolts, but I think that after plates

are put on and rolls start to grind, the plates move backward and from the way the rolls are running until the bolts are against the forward side of holes in plates. Now the bolt nearest to center line of plate will get the strain first, and if the plate continues to move backward until the hole in opposite end of plate touches bolt, it cannot possibly maintain its proper bearing on arbor and I think caused bolts to break and explains why some plates sound solid when first put on and hollow after running a short time. "

Respectfully yours

M. S. Fayner.

*Emergency*

DEC 24 1903

DEC 24 1903

DEC 24 1903

Number 603

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., DEC 16 1903

Mr. H. S. Moulton, Manager.  
On Log Report of Dec. 6th,  
Item 6-30 Department Clinker Grinder.  
Shut down - broken staves on special idler, Conveyor No. 130.

1- Can anything be done to stop trouble with special idlers?

2- *Mason Try Iron Belts But I think you will find that iron will not last as long as wood - belt lagging or rubber probably be better.*  
THOMAS A. EDISON, General Manager.

To Mr. Nelson  
12/12/03.

Referred to Mr. Wherry - 12-13-03 for explanation.

1- *The special idlers are nearly always on the under side of the belt, are 30" long for 36" belt and the belt turns down at the edges, with rather a heavy strain, wearing the idlers considerably for 3 to 6" from the ends, and when worn nearly worn out, the rest of the idler will be good, we try to run these as long as possible to get the limit of service, and are constantly replacing them. Possibly a light iron idler at these particular places would be a good investment. I think this is a very good suggestion that we could use Extra heavy iron.*

New Village, N. J., DEC 15 1903

*W.H.M.* *O F Pilling*  
12-16-03

DEC 11 1903

DEC 22 1903  
*Alfred at one will try one of each kind.*

*W.H.M.*  
12-22-03

Orange Hill

Number 605

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J.,

Mr. H. S. Moulton, Manager.

On                      Inspectors Report of Dec. 5th,

Item 2859 Department                     

Armature and fields of motor driving Con. 132 are very dirty.  
Barnes, there is an air connection just below this. Better con-  
nect up, hose and clean.

If hand bellows were carried by inspectors and blown each  
day, there would be no accumulation, it will be impracticable to  
carry air all over plant. Cannot the bellows be used practically?  
Why does dust get into chamber of 132 anyway?

  
THOMAS A. EDISON, General Manager.

Referred to Mr. Barnes - 12-13-10 for explanation.

Hand bellows are used by inspection & clean  
daily but force is not great enough to move  
all the dust accumulated by a 50 horse motor  
while running so do not ask to have air connect  
allow plant we have now got it to 104,110  
and by using this long hose we can  
get to last every motor in chalk Plant  
highly not put it in #2 blower with valve  
connection at floor so we can use it  
in four smaller Plant when needed

New Village, N. J., 12/10 1903 over

WTH  
12-16-10

Barnes

[ON BACK OF PRECEDING PAGE]

TROUBLE INQUIRY.

Department

Part

Nature of Trouble

outside of this Blown we can clean  
old motor with air gun, dust gets in  
chamber as in case after chamber as you  
cannot keep it out until the air is drawn  
through, giving this load gun with  
fine blast dust which when delivered a  
quarter of a second dust to go into  
chamber is a cloud but is immediately exhausted  
and by fan in the rear. Then the motor is  
gotten into of this I am dust though we always  
cover up motor when cleaning. I am  
and so far we have had no trouble to keep them  
clean this is by no means as severe as it looks on paper.

*Orange office*

Number 607

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Dec 20 1903

Mr. H. S. Moulton, Manager.

On Inspectors Report of Dec. 5th,

Item 2862 Department

One pawl spring very weak on safety device of Elevator #2. Huffman,  
replace using larger wire.

What is being done in way of getting better or rather,  
longer and more elastic springs and dust proof oil casing here?

*Handwritten signature of Thomas A. Edison*

THOMAS A. EDISON, General Manager.

See Memorandum 11-103

Referred to Mr.  for explanation.

*This was shown up on sketch 12-11-03 - on  
on pulleys & not on safety device.*

New Village, N. J., 12-13-1903

*WATMAN*

DEC 11 1903

*Design Office*

100-100

Number 608

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., DEC 11 1903

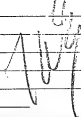
Mr. H. S. Foulton, Manager.

On Inspectors Report of Dec. 5th,

Item 2863 Department

One pawl spring too short on safety device of Elev. #2. Huffman,  
replace using larger wire.

Why was spring made too short, when it was known that this  
is an important place?



THOMAS A. EDISON, General Manager.

In Mr. Mason Dec 11-03

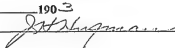
Referred to Mr. Huffman - 12-13-03 for explanation.

All wire springs were of one length,  
but it was bent in a peculiar manner  
when taken out which made it short but  
it never came off the pawl pin.  
Larger wire, and different style of spring  
is now being used, also larger, which will  
prevent this occurring again.

New Village, N. J., 12/15

1903

looker  
12-11-03



DEC 11 1903

Mr. Thomas A. Edison.

Stewartsville N.J. 12/10/03

Orange

N.J.

*file*

Dear Sir

The troubles with scraper conveyors are the following, thrust of wheels are not large enough, wheels are not kept oiled, rails do not have proper ending at head and tail pulleys, oil felts wearing on corrugated iron in dust bins, shrinkage of raw hide gaskets under oil cups, when running to one side at head or tail pulleys are left too long before rewinding, Conveyor #134 is in a very bad condition due to not applying the proper remedy (new wheels) the first time there was trouble with it. The gauge of track was changed by Mr. Cony to suit badly worn wheels, shortly after several new wheels were put on and the result was new wheels would climb the rails spread the track throw it out of line and allow worn wheels to run between and off of track. This occurred several times and strained the ropes so bad that it is a hard matter to make ropes track right on head and tail pulleys. The cause of near drive shaft bearing on <sup>getting out of line</sup> chinker grinder, #1, was due to bearing not being dowed to ginder, this job was done at night the man that done it told me Mr. Kader instructed him not to dowel bearing. It has been discovered (by Hufman & Dills) this afternoon that left roll shaft of chinker grinder #1 is broken in center, rolls have not been taken apart yet and I cannot state nature of break but I think shaft was weakened by putting in screws to secure arbor.



[ON BACK OF PRECEDING PAGE]

236

1 Big black }  
1 Small y. } bellin  
or possibly 1 more }  
one of 2 shown on J.P. 211.

109 - black spot  
only celluloid -

172: bottom only  
faint on end -  
+ one ~~2nd~~ stripe

112 2 or 3 black  
spots only bottom

40

Thick line on two  
black spots -

58 - Big black  
possibly 1 weak shiny on bellin  
not so shiny on top -

*Orange Office*

DEC 12 1903

Number 611

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., DEC 12 1903

Mr. E. S. Foulton, Manager.

On Inspectors Report of Dec. 7th,

Item 5222

Department

4 o'clock A.M., found man asleep in motor chamber of Elev. #2. Noted.

Who was man found asleep in Motor chamber of Elevator #2.  
at 4 A.M. and what is being done about it?

  
THOMAS A. EDISON, General Manager.

Downman Dec 12-03

Referred to Mr. \_\_\_\_\_ for explanation.

*Noted that this man had been  
discharged but found I was mistaken  
and had mis understood what former  
interview. His name was Down  
he has been discharged two or three days ago.*

New Village, N. J., 12-18 1903

*W. H. H.*

DEC 12 1903

Orange N.J.

JAN 24 1904

DEC 12 1903

Number 612

## TROUBLE INQUIRY.

Edison Portland Cement Company.

DEC 12 1903

Orange, N. J.,

Mr. H. S. Moulton, Manager.

On Inspectors Report of Dec. 7th,

Item 2877 Department

Steam pipe heating oil pipes to #2 engine shaft leak very badly, causing wood lagging on front pulley to become wet. 3rd notice. Now, I understand this was fixed over. What is the trouble?

Why third notice?

Can't this be fixed permanently?

THOMAS A. EDISON, General Manager.

John Mason Dec 12-03

Referred to Mr. Morgan 12-12-03 for explanation.

There pipes have all been repaired three times. The trouble is not like the "leak" for want of a proper crack at the end of the line out leading on #2 and comes back a great deal of shaking and vibration causes them to crack and have taken out a number of leading cables in that area.

#2. I think there are OK now & do not anticipate any more trouble.

New Village, N. J., Dec 16<sup>th</sup>

1903

DEC 12 1903

written 12-18-03

JAN 2-1904

written 1-20-04

116 Mr Morgan

oil dept

#2

*Orange office*

Dec 16 1903

Number 614

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Dec 16 1903

Mr. H. S. Moulton, Manager.  
On Log Report of Dec. 7th,  
Item Crusher plant- 187 Department Quarry

Why is it that with 187 cars sent to Crusher plant and a  
crushing time of 436 minutes, that only 157 cars passed through an  
average of 8.31 minutes per train hoisted on 112 tons per hour?

*W. A.*  
THOMAS A. EDISON, General Manager.

*Transm. Dec 12-03*  
Referred to Mr. Pingree 12-13-03 for explanation.

*First item on log shows that we waited  
10 3 minutes for truck.  
We make no attempt to crowd feed on cement  
truck; but to drag it.*

New Village, N. J., Dec 14 1903

*CONF*  
12-14-03

*Pingree*

Referred to Mr Massey for his information,  
You will see that there are some things in the arrangement  
of rolls etc that show <sup>at Stuartville N.J. 12/14/03</sup>

Mr Thomas A. Edison.

Noted by Mr Massey also told Edison to investigate the rolls  
12-19-03. See letter to Mr Edison  
Dear Sir

Orange

N.J.

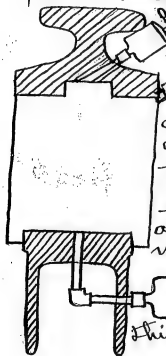
DEC 22 1903

2

The left shaft of Chinker grinder #1 was a clean break and was crystallized. I think the shaft was broken by running rolls with broken plates. The plates were broken by iron that got in chinker stock house due to earliness of men working on conveyor #12. A short time ago these rolls were run for five hours at night with broken plates there has not been many broken plates on chinker grinders but a large number have broken on chalk grinders and of late they are removed as soon as it is discovered they are broken, when we first started up they would run for weeks with broken plates. I know that ropes shears on grinders do not get enough oil very often the oil hole in shaft gets so much oil in it that oil will run out of end of shaft where oil pipe enters when this occurs roll men shut off all supply, wool packing around the oil pipes entering shafts does not keep oil in nor dust out, some time ago I found oil hole in one shaft on chalk grinder plugged with wool so that oil could not feed to shears. This was caused by roll men when changing ropes pulling oil pipe out of end of shaft and shoving it back in, when pipe was pulled out wool closed in space occupied by pipe when pipe was shoved back in wool caught on end of pipe and went in ahead of pipe closing oil hole.

# 2

The bottom girders of chucker grinder #1 are wore quite bad (about  $\frac{1}{2}$ " deep) would suggest that residuum oil or grease be used as shown in sketch I know it will reduce friction and wear to a very large extent and ~~will~~ can be applied at a small expense.



The use of baffle plates in hoppers of grinders is a bad thing by the use of them you only get about  $\frac{1}{2}$  to  $\frac{3}{4}$  of the <sup>surface of</sup> corrugations that does grinding and the ore delivers directly on one cheek plate which wears very rapidly and allows a large amount to pass through without being ground. How would it do to have a set of plates tried with corrugations cast all of center of plate by this the whole surface of corrugations would grind and you would get the desired result in fastening spacing rolls equally. Do not think there is any increase of friction in



rolls except the bearing on dryer girders and rope sheaves do not get enough oil, yesterday I had one man to

turn left roll of chucker grinder while I inspected plates I never knew one man to turn roll alone before. Could there not be an movable cheek plate next to intermediate roll that would open and close with roll I think it could be operated by the movement of bearings independent of each other. I imagine a large amount of ore passes between cheek plates and

#3

intermediate roll that is not ground. One of the worst troubles in chicken grinding plant is that they cannot get enough feed to grinder #2 to open spacing rolls more than  $\frac{3}{16}$ " which is not enough, it is claimed by the foreman to put on more feed will overload Elk #2 and cause fuses to blow. Last week Brown was off and I spent as much time as I could at chicken grinder. I found that one was going over overflow of con #132 and they had con #129 running at its slowest speed (one notch on starting box) and spacing rolls of grinder #2 open from  $0\frac{1}{16}$ ". I had them to shut down and shovel out Sdump on con #132. I then discovered that a adjustable plate called for on drawing had been omitted and a large amount of ore was running over overflow that should have gone to grinder. I took measurements and made a plate that reduced overflow 4" and put it in at noon in the afternoon they were able to run from 3 to 5 notches on starting box which increased output. Would suggest that you appoint some one to spend two weeks at chicken plant and find out why more <sup>load</sup> cannot be put on grinder #2. I know that it does not get enough feed and I believe the trouble lies between Sdump of con #132 and the rolls. I have never saw 36" belt driving grinders slip and I know that the belt is too tight. Belt dressing is being used on belt so much that there is path of it on pulleys and belt  $\frac{1}{2}$ " deep. I believe that the ~~the~~ belt slipping is imaginary. I discovered to day that a armature shaft taken out of con #125 has a groove worn in it  $\frac{3}{32}$ " deep caused by hardened oil chain. This is very serious and there should be no delay in remedying.

Respectfully yours M. J. Joyce.

[ON BACK OF PRECEDING PAGE]

Mason

~~1.6.1909~~  
~~6.1.1909~~  
~~1.6.1909~~



*Orange office*

Number 628

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

Dec 15 1903

Mr. H. S. Moulton, Manager.

On Log Report of Dec. 10th,

Item 10-26 Department Crusher Plant

Stop feed- Dryer choked.

What caused Dryer to choke on carbonate which I have understood does not choke.

*TH*  
THOMAS A. EDISON, General Manager.

To Mr. Moulton Dec 16-03

Referred to Mr. Pingree 12-16-03 for explanation.

*Carbonate rock was very dirty and wet clay mixed with it. Worked badly then coming also. Another reason- We were having con. #103 aligned this A.M. and had been waiting some time for rock. I neglected to give Dickman time enough to get Pingree thoroughly hot. Consequently ore would not then slide from tuffle plates readily. We had let pins go down while waiting for rock. It was necessary to run shaker during next day to keep plates clean.*

New Village, N. J., Dec-16

1903

*Appleby*  
12-15-03

*Pingree*

DEC 16 1903

Comp office

DEC 15 1903

DEC 15 1904

Number 631

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., DEC 15 1903

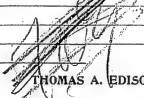
Mr. H.S. Moulton, Manager.

On Log Report of Dec. 10th.

Item 8-00 Department Clinker Grinder

Shut down - Coupling bolt loose on grinder.

What coupling bolt was broken and how? This is new.

2<sup>nd</sup> Mason How about chg 2  
  
THOMAS A. EDISON, General Manager.

Referred to Mr. C. H. M. - 12-16-03 for explanation.

The Bolt that was Broken was in Coupling that connects Drive Pulley With Roller is cannot not account for it either than it was Pulled up to hard as it was not on Duty on account of sickness

I think the above is the reason for bolt breaking

New Village, N. J., Dec 17 190

letting  
12-18-03

letting  
1-12-04



DEC 16 1903

JAN 2-1904

#2

*range office*

DEC 12 1903

Number 640

# TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., Dec 15 1903

Mr. H.S. Moulton, Manager.

On Log Report of Dec. 11th,

Item 6-18 Department Clinker Grinder

Shut down- Dust rings worked out of bearings- on flexible shaft  
on elevator No. 131. Waiting for oil men to pack bearing and put  
rings in.

Why did dust rings work out on bearings on Elevator 131?  
Is it because cotters shear? I understand every time this occurs,  
holes are drilled larger and larger pin put in. Wouldn't it be  
better to go through the plant now at important points and make the  
change rather than to wait until the trouble develops? Here is a  
loss of 71 minutes that probably could have been prevented, as I  
read the log. Will Mr. Mason take this matter up and kill this bug  
once for all? It is coming to the front too frequently, as reports  
show.

*THOMAS A. EDISON*  
THOMAS A. EDISON, General Manager.

*Re Mason Dec 16 03*  
Referred to Mr. \_\_\_\_\_ for explanation.

*I have ordered large cotter pins put*  
*in all blower packing boxes - Blower fan*  
*Roll hangers + flexible drives. I think*  
*this on the plans that cause wear on wheels.*

New Village, N. J., 12-18-1 1903  
*W.A.M.*

Wm. H. HARRINGTON,  
PRESIDENT

W. M. MALLORY,  
VICE-PRES.

W. M. HARRIS,  
TREASURER

THOMAS E. GRANT,  
SECRETARY

JOHN A. EDISON,  
SUPERVISOR

# THE EDISON PORTLAND CEMENT CO.,

TELEGRAPH AND PASSENGER STATION, NEW VILLAGE, N. J.

(P. O. ADDRESS) STEWARTSVILLE, N. J., Dec. 15, 1903.

In re Special Inspector's report.

Mr. Thomas A. Edison, O. M.,

Orange, N. J.

Dear Sir:

*Mass - what do  
you think of this  
Edison*

Wire ropes on 3 high rolls. These ropes wear out on the outside. The inner wires of samples I have examined are in good condition. The ropes show plainly that they have been chafed off by rubbing against something where they should not. This seems to be due to wrong alignment of the idlers and improper shape of grooves. I understand that these sheaves were provided with  $3/4$ " grooves having straight sides and  $3/8$ " radius at the bottom. ....

If they were made with  $5/16$ " radius at the bottom, and with sides forming an angle of  $30^\circ$ , or as near this as the width of the sheaves would permit, I think the trouble would disappear. The difference between the lives of the ropes at the chalk rolls and at the clinker grinder seems to me to be of little consequence. Both are running under bad conditions and with bad results.

I would recommend changing the grooves on the grinder now out of commission at once.

Yours truly,

*A. L. Goddard*

DEC 18 1903 DEC 22 1903 DEC 24 1903

Referred to .....

Instructions .....

Inspected by *W. H. M. 12-12-03 - See letter to*

.....19..... *M. Edison*

*Manager's Office*

DEC 12 4 1903

Number 644

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., Dec 11 5 1903

Mr. H. S. Moulton, Manager.

On Inspectors Report of Dec. 10th,

Item 2894 Department

Wood lagging is wearing very rapidly on lower special idler next to head pulley of Con. 132. Pilling, is the brush here O.K.?

Will Mr. Mason try the experiment of covering a new special idler with belting lagged on or pure 1/8 rubber to see if this wear cannot be diminished? Do brushes diminish wear? This special idler is getting to be a nuisance and something should be done in the way of experiment to cure the evil.

  
THOMAS A. EDISON, General Manager.

*to Mr. Mason Dec 17 1903*  
Referred to Mr. Wm. Conroy set of permits for explanation.  
*as advised 12-15-03*

We are about to try some changes in these idlers with a view of stopping the trouble.

These special idlers do very heavy work, and I don't believe they wear out any quicker in one place than another. They have been running about an equal length of time, and each conveyor has had its share of the trouble. But all giving out practically at the same time gives the appearance of rapid wearing, more so than is really the case.

New Village, N. J., Dec 19 1903

W. Pilling

DEC 17 1903

*copy of office*

DEC 12 1903

Number 649

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., DEC 16 1903

Mr. H.S. Moulton, Manager.  
On Inspectors Report of Dec. 11th,  
Item 2898-2899 Department

2898- Three mesh broken in rear bottom screen of dryer #7. Huffman,  
replace.  
2899- One mesh broken in front bottom screen of dryer #7. Huffman, re-  
place.

Where is Dryer No. 7? This is a new one on me, or perhaps  
these reports are not read by persons who should read them, conse-  
quently mistake not detected. Perhaps it is Dryer No. 1. If  
so, I notice it is marked for Huffman to replace. Do I understand  
that whole screen plate is removed when one mesh is broken or is it  
meant that a patch be put on. I understood patching was O.K. where  
there was only one or two holes.

THOMAS A. EDISON, General Manager.

*In the morning Dec 17-03*  
Referred to Mr. Jayne - 12-15-03 for explanation.

This was marked Dryer #1 on inspectors book, &  
do not see them after they are type-written  
The Patching is all right until screen is  
badly worn, then it is more economical to remove  
both 12-18-03,

I ask reports after they are type-written and ask to please  
for mistake.

New Village, N. J., 12/15 1903

*lost*  
12-15-03

*M.A. Jayne*

*I never sign a document of any kind without first reading it over  
and in this case. I did not reply that the numeral used was incorrect.*

DEC 17 1903

11/19/03 H.S. Moulton

Orange office

DEC 16 1903

Number 656

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J.,

DEC 16 1903

Mr. H.S. Moulton, Manager.  
On Log Report of Dec. 12th,  
Item 8-26 Department Crusher Plant  
Cars stuck in switch at foot of incline, Cause: cars pushed too far through shed.

Pushing cars too far through shed is reported right along.  
I have asked twice if it cannot be stopped and have received no answer.

THOMAS A. EDISON, General Manager.

In New Madison Dec 17-03

Referred to Mr. \_\_\_\_\_ for explanation.

I wrote you an explanation of this trouble - day that is when there was a bout 20 or 25 cars in the small box got them started. I could not always stop them just in place & could not pull them back if set too far. I have had a sign painted showing when to set cars. One reason for the new catwalk is that Piquet has changed the support location of the car since cold weather.

New Village, N. J.,

12-18

1903

Cotton.

DEC 17 1903

W. H. MULLINGS,  
President.W. S. MALLORY,  
Vice-President.W. H. FILLARD,  
Treasurer.TERENCE J. CLARK,  
Secretary.VICTOR A. EDWARDS,  
Chief Engineer.

## THE EDISON PORTLAND CEMENT CO.

TELEGRAPH AND PASSENGER STATION, NEW VILLAGE, N. J.

(P. O. ADDRESS) STEWARTSVILLE, N. J. Dec. 16, 1903.

In Re Motors:

Mr. W. S. Mallory, V. P.,  
Orange, N. J.

Dear Sir:-

Referring to your letter of the 5th inst., in re matter of taking ammeter readings of motors at stated intervals, I beg to report that, after having discussed and experimented on this subject for a time, Mr. Goodwillie devised a portable connection which can be attached to the terminal boards, by which means readings may be taken without shutting down the motor.

Mr. Goodwillie has already taken readings at various points on the plant, and this work will be pursued as fast as will be found to be consistent with giving the regular and emergency work the necessary attention.

Following is a statement of readings taken in Chalk Grinding Plant, up to the 12th inst., to wit:

Switchboard reading 480 amperes, average load.	
R.F. to No. 109 and Dynamo for same, -----	2
Conveyor No. 109 -----	135
Conveyor No. 110 -----	80
R. F. to Grinding rolls -----	10
Conveyor No. 111 -----	35
Blowers -----	100
Conveyor No. 112 -----	33
" 113 -----	32
" 114 -----	31
" 115 -----	30
	488 Amperes.

W. S. Mallory  
170123

Slouch  
7/25

to the  
all right  
Blowers  
empty

W. S. Mallory  
Person  
in book - says to  
Menton  
for  
note  
of head  
empty



Mr.W.S.M.....2.

This is a good average load for the Chalk Plant. The ammeter at switchboard varies from 360 to 550 amperes. The blowers alone will vary 60 amperes from slowest speed to fastest speed. Conveyor No. 109 sometimes goes to 200 amperes.

We will be pleased to carry out any further instructions which you may have to give us upon this subject.

Yours truly,

H.S.M.

The Edison Portland Cement Co.,

*M. S. Newton*

Wm. H. BURBANK, JR.  
PRESIDENT

W. B. HILLMAN,  
TREASURER

W. S. PHILLIPS,  
VICE-PRES.

THOMAS E. EDISON,  
MANUFACTURER

THOMAS A. EDISON,  
DIRECTOR

FORM 5-102-13

## THE EDISON PORTLAND CEMENT CO.

TELEGRAPH AND PASSENGER STATION, NEW VILLAGE, N. J.

(P. O. ADDRESS) STEWARTSVILLE, N. J., Dec. 19, 1903.

IN RE Special Inspector's Report.

Mr. Thomas A. Edison, G. M.,

Orange, N. J.

Dear Sir:

Jacking 3-high rolls apart: The rolls do not spread alike on both ends. The front end on all three 3-high rolls ordinarily opens the widest. Sometimes they will run for hours with the front end open  $1\frac{1}{2}$ ", and the back end open  $1\frac{1}{16}$ ". This, of course, is measured at the friction rolls. Mr. Mason tells me that he has seen the back end open the widest for a short time, but they will not stay that way, but soon change over to the usual position. On Dec. 16, #2 grinder ran with front end open  $1\frac{1}{2}$ ", and back end open  $1\frac{1}{16}$ ", practically all the time it was running. Dec. 17, in the morning the chalk rolls were open  $3\frac{5}{8}$ " and  $1\frac{1}{16}$ " when the feed was heavy with feed light owing to hanging up in the "Bijou", rolls were open  $3\frac{1}{16}$ " and  $1\frac{1}{32}$ ". On Dec. 17, at noon, Mr. O'Brien put a deflecting plate in the chute about <sup>6 in.</sup> ~~2 ft.~~ above the rolls, so as to throw the feed to the back side. When started up the front side opened  $1\frac{1}{16}$ " and the back side  $1\frac{1}{2}$ ". They ran this way about 20 minutes. Upon increasing the feed they swung over to the old conditions, and ran that way till shut down. On Dec. 18, in the morning, they quickly took the customary positions, open on the front side about  $1\frac{1}{2}$ ". I had a 1" sq. bar turned up at one end to hook into the gain cut out on one corner of the bearings and with a chain, led out to the end of the housings, and a crowbar, I exerted an estimated pull of 5,000#, but could



Sheet.....#3.

Mr. Thomas A. Edison, G. M.

hundred pounds load introduced either by counterweight or spring, and adjusted occasionally will complete the cure. When running with the rolls apart on each side about  $1\frac{1}{4}$ ", they passed about all Mr. O'Brien thought the elevator could carry. There is to be an armster on the elevator motor today, and I will try to get the weight of fair samples of load in several buckets. There is rarely more than 3% in the by-pass, and I have never seen more than 5% there. I shall continue to watch this when opportunity offers.

Yours truly,

*A. L. Goddard*

Wm. H. HERRMANN,  
PRESIDENT.W. M. HALL,  
TREASURER.W. M. FILLER,  
MANAGER.GEORGE E. CHASE,  
SECRETARY.THOMAS A. EDISON,  
DIRECTOR.


## THE EDISON PORTLAND CEMENT CO.

TELEGRAPH AND PASSENGER STATION, NEW VILLAGE, N. J.

(P. O. ADDRESS) STEWARTSVILLE, N. J., Dec. 21, 1903.

IN RE Special Inspector's Report.

Mr. Thomas A. Edison, G. M.,  
Orange, N. J.



Dear Sir:

3 High Rolls, supplementary to Dec. 19: On Saturday morning the rolls spread widest on the front side, and 6,000# pull on the bearings would not change them. Later, when the air and feed were manipulated so as to spread them evenly, 6,000# pull would not hold the back side open, but the rolls swung around gradually till the front side swung open about 1 1/2", and the back side was open about 1/16".

The back side of these rolls is the drive side.

Nearly all the load of the conveyor went through the rolls; very little went down the by-pass.

The ammeter readings on Elev. 131 during the morning varied from 175 to 200 amperes. Most of the time it was about 185 amperes. At noon, Mr. O'Brien and I fixed the load in two buckets to correspond as well as we could judge to these conditions, 190 amperes and 175 amperes. The heavier load weighed 105#, and the lighter load weighed 80#. The buckets moved at the rate of from 107 to 110 buckets per minute. The pitch of the buckets is 2', so that the elevator runs from 214 to 220 ft. per minute. With the motor running 700 R. P. M., the elevator should run 222' per minute. Allowing 105# per bucket, and 110 buckets per minute, the rate of passing of material is about 345 tons per hour. This

Sheet.....#2.

Mr. Thomas A. Edison, G. M.

seems very high, but, allowing 80# per bucket and 110 buckets per minute, we would have 264 tons per hour. While this is still high, it is quite certain that the elevator generally carries more than 264 tons per hour. The lower chilled plates in the hopper over the rolls are worn off at the corners, and it is probable that a good deal passes down that way. There are 136 buckets in the conveyor, and, of these, 65 are loaded and moving up at 220 ft. per minute. At 105# per bucket this is equivalent to 45.5 H. P., and at 80# per bucket this would make 35 H. P. If the current consumption were correspondingly 190 amperes and 175 amperes, this would give total motor and machinery efficiencies of 78% and 66%. The former is probably too high. The latter seems to me to be about right.

The rolls come together to within about  $1/16$ " at the ends and  $1/8$ " at the middle where worn.

Yours truly,

*A. L. Goddard*

*Engineering*

DEC 23 1903

Number 672

# TROUBLE INQUIRY.

## Edison Portland Cement Company.

Orange, N. J., Dec 22 1903

Mr. H. S. Moulton Manager.

On Log Report of Dec. 16, 1903

Item Roaster Plant Department

12.55 P. M. Shut down to clean commutator on roaster motor.

Are  
is commutators on kiln motors still troublesome? Didnt cutting of  
mica cure the sparking? Why is it necessary to clean commutator. There  
seems to have been three times in 24 hours. Why is this?

*THM*  
THOMAS A. EDISON, General Manager.

Referred to Mr. Mason, DEC 23 1903

Referred to Mr. Warren, 12-27-03 for explanation.  
There was out on both kiln  
motors about Nov 26 it was  
cut down about 11/4  
These motors have run all  
right untill about Dec 14  
when they commenced to  
give trouble again it was  
found then that copper had  
worn down to mica again.  
We have now commenced to  
use a different brush which

New Village, N. J., 12/28

1903

W. A. Warren

DEC 23 1903

*W. A. Warren*  
*12/28/03*

(over)

[ON BACK OF PRECEDING PAGE]

*is softer + contains more  
graphite which I think will  
cause much less wear on  
commutators.*

Mr. \_\_\_\_\_  
Department of \_\_\_\_\_  
On \_\_\_\_\_  
Manager \_\_\_\_\_

**TROUBLE INQUIRY**

Department \_\_\_\_\_

Part \_\_\_\_\_

Nature of Trouble \_\_\_\_\_

THOMAS A. EDISON, General Manager

for explanation



*Orange office*

Number 677

## TROUBLE INQUIRY.

Edison Portland Cement Company.

*Jan - 2 1904*

Orange, N. J., DEC 23 1903

Mr. H. S. Moulton Manager.

On Log Report of Dec. 15, 1903

Item 8.08 Department Crusher Plant

Frozen ore in hopper under Giants arches over

At Edison we heated bottom of giant hopper with steam pipes in  
contact with iron outside.

THOMAS A. EDISON, General Manager.

Referred to Mr. Mason, DEC 23 1903

Referred to Mr. \_\_\_\_\_ for explanation.

*We have ordered a radiator coil to be  
put up against hopper + with bag support.*

New Village, N. J., DEC 12 29 1903

*W. H. Mason*

DEC 23 1903

Orange office

Number 684

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

Mr. H. S. Moulton Manager.

On Log Report of Dec. 14, 1903

Item 10/25 Department Clinker Fine grinder

Three belt hooks broke in drive belt of grinder. Waiting for belt men to put new hooks in belt. Mill men helping belt men and cleaning mill 161 minutes.

Day run on fine grinder is a pretty tough shying

Why did it take two hours and forty minutes to put three belt hooks in 36" drive belts.

THOMAS A. EDISON, General Manager.

Referred to Mr. Mason. DEC 23 1903

Referred to Mr. Pulling 12-23-03 for explanation.

This was a night job. With a belt man who has not had much experience with such matters. But even at this time is not very bad.

The better these clutch hooks are put in. The longer it takes to get one out. This has to be done very carefully to avoid damaging the belt. and the best thing we have been able to make with a single one is about one hour.

New Village, N. J., DEC 24 1903

O. F. Pulling

DEC 23 1903

Orange Office

Number 687

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J., DEC 23 1903  
Mr. H. S. Moulton Manager.  
On Log Report of Dec. 14, 1903  
Item 534 Department Clinker Fine Grinder  
Belt hooks broke on drive belt. Waiting for belt men to put new hooks  
in belt. Mill men helping belt men.

What caused belt hooks to break on drive belt. My experience all goes to show that when belt hooks are of right kind that they will not break so soon after using except that belt is of own up entirely too tight. The belt should slip first, if it slips when fairly tight find out reason and don't draw up belt to limit. There is something wrong here and has been wrong for some time.

THOMAS A. EDISON, General Manager.

Referred to Mr. Mason. DEC 23 1903  
Referred to Mr. *Filling* 12-23-03 for explanation.

*The principal cause of breakage, was that the hooks were weak in the back, not in the hook part, with all we have used we have never had but one pullout. We were compelled to use these fasteners owing to the delay in receiving others which had been ordered by Xpress on Dec 2nd, and consequently had to stand the trouble. Again I admit that the belt was too tight, it had been cut off to enable the repairmen to put new sheaves bushings in the pulley, and when we cut off this belt, it must stand a take up of 4", or otherwise have a new filler part in making 2 cuts and a filler 8" longer.*

New Village, N. J., Dec 24 1903

*I filling*  
We must take a chance of drawing up the 4" when we think it possible, otherwise we would either have to have a belt factory right here, or put in more fillers. I wish to say that I

DEC 24 1903

[ON BACK OF PRECEDING PAGE]

think we are about through with these breakages on this belt. as we have the kind of books we want. they are in good, and we expect a good run out of it as now fixed.

*Wm. H. Miller*

**TROUBLE INQUIRY.**

Department

Part

Nature of Trouble

*copy file*

DEC 29 1903

Number 688

## TROUBLE INQUIRY.

Edison Portland Cement Company.

Orange, N. J., DEC 22 1903

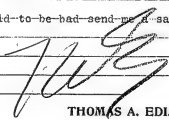
Mr. H. S. Moulton Manager.

On Inspectors Report of Dec. 16, 1903

Item 5287 to 5286 Department

Oil wanted in gear case, Con. 113, 114, 117, 109, 112, 110.

Why is oil wanted. Has it leaked out or is oil bad. If leaked out cant it be stopped. If oil is said to be bad send me a sample.



THOMAS A. EDISON, General Manager.

Referred to Mr. Mason. DEC 23 1903

Referred to Mr. Meyer, 2-23-03 for explanation.

The above gear boxes were all re-oiled on Dec. 16<sup>th</sup> 03.  
The oil does not leak out but wears and gets thick and dark and a little short of the proper amount of oil.  
Will send sample next time any of them are re-oiled.

New Village, N. J., Dec 24<sup>th</sup>

1903

Mr Meyer  
oil sent

DEC 23 1903

*10/10/03  
Although letter  
sent, I did not  
send this until  
the 24th.*

Orange office

DEC 29 1903

Number 689

## TROUBLE INQUIRY.

### Edison Portland Cement Company.

Orange, N. J.,

DEC 22 1903

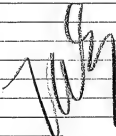
Mr. H. S. Moulton Manager.

On Inspectors Report of Dec. 16, 1903

Item 5277 Department

Several wheels dry on Conveyor 139. Moyer, XXXXX Examine dry wheels and see if there is oil in cup.

Are you trying grease in wheels?



THOMAS A. EDISON, General Manager.

Referred to Mr. Mason. DEC 23 1903

Referred to Mr. Moyer 12-23-03 for explanation.

I have taken up some oil cups on conveyor  
70 113-139 which were sealed with petroleum  
oil. Had plenty in them but would not go through  
to thrust.

Have put some grease in cups of Boland's No 2  
con 113-118 but have not seen today enough to get  
any result from them as yet

New Village, N. J.

1903

M. M. Moyer

Oil Dept

DEC 23 1903

Although later, J.  
the 2nd day  
did not answer it  
until this day.  
M. M. Moyer

**Edison Portland Cement Company Records  
Plant Operations - Mill Log Transcripts (1904-1918)**

This folder contains documents regarding daily operations at the Stewartville works. Included is information about the crushers; the quarry; and the weighing, mixing, chalk, coal, and roaster plants. Many of the items bear Edison's initials, as well as calculations that were possibly made by him.

Less than one percent of the documents have been selected. The selected items contain substantive notations by Edison.

THE EDISON PORTLAND CEMENT CO.

Transcript of MILL LOG for FRIDAY, MAY 20, 1904.

--oooOooo--

Time

Run Loss Folio

CLIMBER FINE GRINDER:

Grinder: No. 2.

Note: Putting through spill from cleanings  
of mill last winter.

7.00	Waiting for speed				4
7.04	Grinding			296	
12.00	Shut down - Lunch				
12.20	Making up shear, one shear pin fast				40
1.00	Waiting for speed				3
1.05	Grinding			247	
5.10	Shut down for day			<u>Y</u>	
				543	47
	Running	543"	92.03%		
	Loss	47"	7.97%		
	Total	590"	100.00%		

Indicator readings:

7.00 A.M. 56194  
5.10 P.M. 58247 587 Bbls. 65.2 bbls. per hour.

Other departments not in operation.

100  
69  
50  
92  
340

77  
76  
82  
98  
93  
95  
54  
93  
76  
97  
82  
90  
92  
94  
73  
64  
56  
75  
92  
91  
97  
94  
74  
91  
63  
2276

86 2 1/2 lines  
79 1/2 inches per

507  
611 all 446  
last 21, 60

30 2 340  
2 2 46  
5 5 86  
5 5 86  
18 60  
18 60

33 2583  
2506  
2306  
2306  
2306  
2306



The Wilson Portland Cement Co.

JUL 6 1904  
5 P.M.

Transcript of Mill Log for SATURDAY, JULY 2, 1904.

<u>Time</u>	<u>CEMENT ROCK.</u>	<u>QUARRY:-</u>	<u>Run Loss Folio</u> <u>in</u>
7.00	Loaded 21 cars.	20 minutes of the time switching cars and out.	
7.45	Waiting for cars.		
8.25	Loaded 6 cars.	4 minutes switching.	
8.35	Waiting for cars.		
9.05	Loaded 11 cars.	8 minutes switching.	
9.25	Moving up and cleaning track.		
9.40	Loaded 10 cars.	4 minutes switching.	
10.00	Quarrying down stone.		
10.40	Loaded 11 cars.	5 minutes switching.	
10.55	Waiting for cars.		
11.05	Loaded 11 cars.	5 minutes switching.	
11.20	Moving shovel.		
11.25	Loaded 22 cars.	10 minutes switching.	
12.00	Lunch.		
12.30	Waiting for cars.		
1.45	Loaded 15 cars.	10 minutes switching.	
2.15	Waiting for cars.		
2.30	Car off track.		
2.40	Loaded 13 cars.	5 minutes switching.	
3.00	Loaded 15 cars.		
3.30	Car off track.		
3.40	Loaded 15 cars for dump.		
5.10	Shut down for day.		
Cars sent to crusher			135
Cars sent to Waste Pile.			16
Hours drilling,			48
Feet drilled.			145

Mallory

Want feet drilled per drill ~~crew~~ of 2

This report made wrong -

Can't ascertain the minutes lost in  
waiting for Cars - Have it made

Like Well record. Then we can  
get at loss time & possibly get a  
second degree

Σ

THE EDISON PORTLAND CEMENT CO.

Transcript of Mill Log for FRIDAY, Nov. 24, 1905.

--000--  
QUARRY

Time		Run	Loss	Folio
	Carbonate rock; carbonate cut.			
7.00	Waiting for cars			15
7.15	Loaded 14 cars	30		
7.45	Waiting for cars			30
8.15	Loaded 7 cars	10		
8.25	Moving up steam shovel			10
8.35	Loaded 8 cars	20		
8.55	Waiting for cars			85
10.20	Loaded 14 cars	20		
10.40	Waiting for cars			80
12.00	Lunch			
12.20	Waiting for cars			45
1.05	Loaded 18 cars	40		
1.45	Waiting for cars			30
2.15	Loaded 18 cars	35		
2.50	Waiting for cars			25
3.15	Loaded 7 cars	10		
3.25	Cleaning slide off of loading track			20
3.45	Loaded 11 cars	25		
4.10	Waiting for cars			60
5.10	Shut down for day			
		190	400	
	Running 190"		32.20%	
	Loss 400"		67.80%	
	590"		100.00%	

Cars sent to Crusher  
Cars sent to Waste Pile

97.  
None.

	Cement rock; cement cut.			
7.00	Loaded 16 cars	45		
7.45	Waiting for cars			55
8.30	Loaded 19 cars	40		
9.30	Waiting for cars			130
11.40	Loaded 8 cars	20		
12.00	Lunch			
12.20	Loaded 7 cars	20		
12.40	Waiting for cars			125
2.45	Cleaning slide off of loading track			20
3.05	Loaded 18 cars	50		
3.55	Waiting for cars			75
5.10	Shut down for day			
		175	415	
	Running 175"		29.65%	
	Loss 415"		70.34%	
	590"		100.00%	

Cars sent to Crusher  
Cars sent to Waste Pile  
Keystone Drill:  
Feet drilled  
2 Drillers  
2 Helpers

68.  
None.  
59.  
23 Hrs.  
23 Hrs.

--000--

Mill Log..2. 11/24/05.

CRUSHER PLANT

Time		Run	Loss	Folio
7.00	Waiting for steam		29	
7.29	Crushing cement rock	28		
7.57	Shut down; shear on 1st 36" rear roll; 2 pins were only sheared; could not get them out; started up until 3rd pin sheared		17	
8.14	Crushing	6		
8.20	Shut down; shear on 1st 36" rear roll; took wabblor out to drive shear pins out. See above		40	
9.00	Crushing	13		
9.13	Moving tripper from bin #6 to bin #1		5	
9.18	Large rock stuck in hopper over giant rolls		10	
9.28	Shut down; no steam		22	
9.50	Crushing carbonate rock	23		
10.13	Shut down; no steam		12	
10.25	Crushing	26		
10.51	Shut down; no steam		27	
11.18	Stone in 1st 36" roll; rolls would not start		3	
11.21	Crushing	6		
11.27	Shut down; gate over 3rd 36" rolls partly closed; filled hopper to 2nd 36" rolls; new man got scared and shut down which caused 3rd 36" rolls to choke		28	
11.55	Crushing	3		
11.58	Shut down; no steam		2	
12.00	Lunch			
12.20	Crushing	37		
12.57	Shut down; no steam		39	
1.56	Crushing	97		
3.13	Shut down; no steam		88	
4.41	Crushing	6		
4.47	Stop feed; chute to conveyor #99 choked		13	
5.00	Crushing	10		
5.10	Shut down for day			
		255	335	

Running 255" 43.22%  
Loss 335" 56.78%  
590" 100.00%

Crushed 28 cars cement rock; placed in bin #6  
" 105 " " placed in bin #1  
" 133 " "

Placed 348 cars of cement rock in bin #6..

--ooc--  
MIXING PLANT

7.00	Redrying bin #1 to #3	30
7.30	No bins ready	
8.58	Redrying bin #6 to #5	182
12.00	Lunch	
12.20	Redrying	290
5.10	Shut down for day	502

Running 502" 100.00%

--ooc--  
WEIGHING PLANT

7.00	Weighting from bins #2 and #4	180
10.00	Shut down for day; bijou supplied	
	Running 180" 100.00%	

30 Weighings:

Cement rock	632070 lbs.	316 tons	70 lbs.
Carbonate rock	411940 "	205 "	1940 "
	1044010 "	522 "	10 "

--ooc--

Mill Log...3a 11/24/05.

CHALK PLANT

Time	Day	Run	Loss	Folio
7.00	Grinding with #2 machine	3		
7.03	No steam		25	
7.28	Grinding	10		
7.38	No steam		32	
8.10	Grinding; had some trouble getting right roll started this item	50		
9.00	Shut down; no steam		490	
5.10	Shut down for day			
	Running	63"	10.50%	
	Loss	537"	89.50%	
		800"	100.00%	

Air pressure 100 lbs.

Amps. Con. #110 150-175.

Rev. Bijou feed roll 7.00 A.M. 259805

Rev. Bijou feed roll 5.10 P.M. 259954 17 tons average 16 tons per hr.

NIGHT:

6.00	New cable on #2 machine; cable ran 55 hours 15 Min. Put on standard rope; tucked, spliced by Dodge (dry rope)		47	
6.47	Grinding	73		
8.00	No steam		5	
8.05	Shut down; right roll stuck fast when starting up. Stuck fast right side in thrust end of #2 machine; repair men working on it; mill men helping repair. "Cause of roll sticking unknown at this item"		595	
6.00	Shut down for night			
	Running	73"	10.14%	
	Loss	647"	89.86%	
		720"	100.00%	

Air pressure 100 lbs.

Amps. Con. #110 125-150.

Rev. Bijou feed roll 6.00 P.M. 259954

Rev. Bijou feed roll 6.00 A.M. 260354 45 tons average 38 tons per hr.

---000---  
COAL PLANT

6.00 A.M.	Running	395	
12.35 P.M.	Bin full		
2.45 P.M.	Running	150	
5.15 P.M.	Shut down; changing shifts		
5.35 P.M.	Running	150	
8.05 P.M.	Bin full		
10.15 P.M.	Running	255	
2.30 A.M.	Bin full		
4.45 A.M.	Running	75	
6.00 A.M.	Running	1025	
	Running	1025"	100.00%

---000---  
ROASTER PLANT

Roaster #1		385	
6.00 A.M.	Running		
12.25 P.M.	Shut down; patching and repairing bad clinker conveyor		45
1.10 P.M.	Running	125	
3.15 P.M.	Shut down; changing <del>xxxx</del> coal feed motor		70
4.25 P.M.	Running	215	
6.00 A.M.	Running		
		1325	115

Mill Log..4. 11/24/05.

ROASTING PLANT

Time	Running	Loss	1325"	92.01%	7.99%	Run	Loss	Folio
			1440"	100.00%				

Indicator reading:  
 6.00 A.M. 48569  
 6.00 A.M. 68817 872 bbls., average 40 bbls. per hour.  
 Coal consumed 72520 lbs., average 84 lbs. per barrel.

--000--

Roaster #2.  
 6.00 A.M. Shut down; on account of chalk being low 1440  
 6.00 A.M. Shut down  
 Loss 1440" 100.00%

XXX

Roaster #3.  
 6.00 A.M. Running 1440  
 6.00 A.M. Running  
 Running 1440" 100.00%

Indicator reading:  
 6.00 A.M. 358608  
 6.00 A.M. 453320 791 bbls., average 33 bbls. per hour.  
 Coal consumed 68420 lbs., average 86 lbs. per barrel.

--000--

Roaster #4.  
 6.00 A.M. Running 1440  
 6.00 A.M. Running  
 Running 1440" 100.00%

Indicator reading:  
 6.00 A.M. 508107  
 6.00 A.M. 540392 710 bbls., average 30 bbls. per hour.  
 Coal consumed 60455 lbs., average 85 lbs. per barrel.

--000--

CLINKER CRUSHER

6.00 A.M. Shut down; repairing shaft on conveyor #126 750  
 6.30 P.M. Running 50  
 7.20 P.M. Shut down; fuse blew on conveyor #127; cause unknown 35  
 7.55 P.M. Running 605  
 6.00 A.M. Running 355 785

Running	655"	45.49%
Loss	785"	54.51%
	1440"	100.00%

--000--

CLINKER FINE GRINDER PLANT

DAY:  
 7.00 Grinding with #1, #2 and #3 grinders 18  
 7.18 No steam 14  
 7.32 Grinding 127  
 7.39 No steam 9  
 8.48 Grinding 24  
 10.12 No steam 15  
 10.27 Grinding 100  
 12.07 No steam 33  
 12.40 Grinding 46  
 1.26 No steam 13  
 1.39 Grinding 166  
 4.25 No steam 15  
 4.40 Grinding 3  
 4.43 Shut down; fuse blew on conveyor #11; due to heavy load; waiting for electricians to put fuse in 17  
 5.00 Grinding 10

2374 Bbls  
 2769 "

Mill Log...5. 11/24/05.

CLINKER FINE GRINDER

Time		Run	Loss	Folio
3.10	Shut down for day	494	116	
	Running	494		
	Loss	116		
		80.98%		
		116"	18.02%	
		810"	100.00%	

Indicator reading:

7.00 A.M. 35801 894 bbls., average 109 bbls. per hour.  
 6.10 P.M. 35938  
 Air pressure 100 lbs. on #1 and #3 grinders.  
 80 " on #2 grinder.  
 Clinker weight 108 lbs. per revolution.

Steam low from:

7.00 to 7.18  
 7.40 to 8.00  
 8.00 to 8.48  
 10.05 to 10.27  
 10.45 to 11.13  
 11.50 to 12.40  
 1.00 to 1.26  
 3.13 to 3.33

NIGHT:

6.00	Waiting for belt man to take up drive belt of #1 grinder		
6.52	Started up	52	2
6.54	Shut down; fuse blew on motor of conveyor #131 - belt overloaded	41	
7.35	Grinding with #1 and #3 grinders (Repair men taking off stuffing boxes and cleaning oil holes out at #2 grinder)	483	38
3.38	Shut down to couple up #2 grinder		
4.16	Grinding with #1, #2 and #3 grinders	104	
6.00	Shut down for night	587	133
	Running	587"	81.53%
	Loss	133"	18.47%
		720"	100.00%

Indicator reading:

6.00 P.M. 38938 1241 bbls., average 127 bbls. per hour.  
 6.00 A.M. 43258  
 Clinker weight 109 lbs. per revolution.  
 Air pressure 100 lbs.  
 Cement on hand - 19,191 bbls.

--oOo--

PACKING PLANT

7.00	Packing; put incars	105	
8.45	Digging out conveyor #145	60	
9.45	Packing	45	15
10.30	4 Gudgeons sheared on conveyor #145		
10.45	Packing	75	
12.00	Lunch		
12.20	Packing	190	30
3.30	Waiting for cars		
4.00	Packing	150	
6.30	Shut down for day	585	105
	Running	585"	84.33%
	Loss	105"	15.67%
		870"	100.00%

Packed 63671 bbls.  
 Loaded from Storage 410 bbls.

2135 Bbls



**EDISON PORTLAND CEMENT COMPANY RECORDS  
PLANT OPERATIONS - NOTEBOOKS**



**Edison Portland Cement Company Records  
Plant Operations Notebook, N-99-04-04**

This notebook covers the period April-October 1899. It was used by Edison's legal counsel, Alexander Elliot, Jr., for notes, opinions, and drawings relating to cement properties at Stewartville and several locations in Pennsylvania. The earliest items mention meetings with Edison. One entry describes the Hercules Portland Cement Co. in Allentown, Pennsylvania. The front cover is labeled "From the Laboratory of Thomas A. Edison," "The Edison Portland Cement Co.," and "Alexander Elliot, Jr., Edison Laboratory, Orange, N.J." The book contains 151 numbered pages, some of which are blank, followed by 7 unnumbered pages. Related material can be found in the Alexander Elliott, Jr., Papers and in the New Jersey and Pennsylvania Concentrating Works Records (*Thomas A. Edison Papers: A Selective Microfilm Edition, Part III*).

for 50 to 65 of each of lines  
19 to 23. Siliceous & lign.  
4 or 5. Magnesian  
5 - magnesian

Crust of

limestone & carbonaceous  
masses of brown & grey  
gas -

1  
Commenced my duties  
with Edison Portland  
Cement Co. April 4. 1899  
by preparing a report for  
the night following which  
for the next few days  
saw to it that Edison's plans  
were carried out - for the afternoon of  
the 11th of April.

April 4, 1899

Prepared opinion for  
Securing Census protection  
in respect of Northern  
and Southern states  
for his approval &  
signature

Wash D.C.  
April 7, 1899

Mr. Catasauqua Pa.  
Dear A. N. Ulrich  
about his opinions  
etc.

April 9th 1899

3

Mr. Hays and I see  
Baltimore from  
noon to 5 p.m.  
I am very - get  
a grand  
impression of  
this home to Chicago  
during 10 p.m.

Mar. April 12 - 1899

At Hazlett - Har Gave  
25<sup>00</sup> - Brimbury - three back  
to Harlow - Examined  
Hornby and W<sup>m</sup> Harlow  
Hornby - then to Cataraugus  
for Carganino's well  
Lith. at Harlow - for  
2. Colman

① 135° arc back  
② 180° " " " " See  
Pleading in

Get Dad note back  
like this

Naz April 18. 1899 -  
 Eagon to May - need  
 Penobscot - track over  
 Gungah tracks - small  
 to water range - ~~not~~  
 by telegraph - free trial  
 Gungah - with her  
 to the same ~~same~~  
 at the trial 18<sup>th</sup>  
 Cap W. his Record of  
 Penobscot on which ~~was~~  
 for full agreement and  
 Penobscot - ~~Penobscot~~  
 1894 & 1895 - ~~Penobscot~~  
 to go to telegraph ~~Penobscot~~  
 Penobscot -

Paul 147 N. 11. 0111  
Josephs Wick Brundage

Hayward, Ca. April 13/99

in air  
washed - 1 mi. N. of Hay  
on road. Peckham -  
Gave permission to France  
to go off on it.

Frank Reed. out at home.  
at home in p.m.

Don Clark - Chapter Box

Office - which expires Oct 1/99  
Copy of office

Shipping Desk.

Catsaugan April 13/99 in p.m.  
Nash says that But farm at  
Denton, R.I. 135. acre. 1 acre to these  
parties about 3 weeks ago for 38.000  
that Sam Thomas bought  
yesterday (Wed) 5 acre & paid  
about 1000 per acre.

that other people paid  
to one Henry 1300 per acre & to  
Geo. Silver 1200 per acre.

Mr. Brinn. gave advice to  
Stanger. which was taken  
into that of Brinn's office  
about 18/99. also said  
the papers had been signed  
titled with name. Charles  
Smith.

Barro Alto

1/2 mile to N  
from 1/2 mile

Barro Alto

Call for mail to age -

Christian Slomo

East  
→

Barro Alto

Barro Alto

Barro Alto

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9.

Collinsville Pa. April 15, 1892

Ground level 130-4 150-  
high, was, all good

Dr. James H. Brown, Jr.

6.1.5. *Wingless grass* Small

Wolke

Wiederholungsfragen

Young Henry's experience in  
the 1910s is a good example of the

Dr. M. V. N., Senior Speech Therapist

C 4-7, 11, 12

Chickens. Super

23 Aug. 7. Riv. near 20

With you & I know you

Prapty Monday night 2

Del Bal & H.

135- a track on a ridge of fern

195 a - back from

Stay - April 1<sup>st</sup> to 11<sup>th</sup> 1899

Quartzite - 1/2 mi N of base

76 = 4 crew - 1 time w/

Julian Raine Report

James R. Riss

2000. 250. <sup>90</sup> Shad 2000

after more - all I need.

Little in wife - she was

Sam. Beck - Ophion 24 peras  
April 1900 - <sup>10</sup> 1/2" long

and give up to me - the apple

Thy. 11th. with J. and A. K. Stimp

Bureau of Census

9. 9.10.1940 - Work as before

Dist. St. 1

Muskegon Springs  
1 April 1900

Robert Edelman - 7/2/74 - 44

before ever did anything - 1-7-8

I will dine with you & Louie

Ruben Reef - not at home

at home in every sense

Stephen West - with child

Chris. Sh. - 14/99  
2500 - 1/2/10 - 3400 - 1/2/10  
1/2/10 - 1/2/10 - 1/2/10  
1/2/10 - 1/2/10 - 1/2/10

1/2/10 - 1/2/10 - 1/2/10

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1/2/10 - 1/2/10 - 1/2/10

1/2/10 - 1/2/10 - 1/2/10

13  
May - April, 14/99

Stephen D. -

no ap. on. But

can explore - north for

price till explore over

paid \$110 - 1/2/10 - 1/2/10

1/2/10 - 1/2/10 - 1/2/10

1/2/10 - 1/2/10 - 1/2/10

1/2/10 - 1/2/10 - 1/2/10

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1/2/10 - 1/2/10 - 1/2/10

1/2/10 - 1/2/10 - 1/2/10



Bath Pa. April 14/99

Henry T. Shultz - 1880  
London Pa.

Grain 750.00 per a.  
feed per aces -  
over 2000 any day

Henry T. Shultz (J. A. Shultz 1880)  
16 a - 20.00 - 20.00

200.00 per aces. 20.00  
mostly road

Grain 165.  
Grain 17.  
Grain 10.  
Grain 2.  
Grain 2.

Hydrogen / leged ad any 10  
Grain / 1000 reflect near  
road / 1000

Bath Pa April 14/99

Carp Woman track  
16 a crop. 20.00  
very much fruit -  
16.00 per aces 4.500.  
Track between - 200.  
Grain - 2000

Grain track ad any track  
on 50. is with 10000  
of many property of 10000  
by 1000 for maintenance  
of 1000 - 1000 1000  
Shultz - Bath -

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May 19

May - April 18th 1899.

17

On line with May's Station

① John Smith - not at home

② G. H. Stem - old man 80 years  
will send H. and J. Smith  
at 20¢ per acre for 10 acres  
for 20.00 = 2.00

③ Joe Shively - near Shakerbourn  
first settled about 1840  
his father's farm  
his father's farm better than his

④ Newell Boonstin -  
not home at home or dead  
in his house

⑤ David Stach - 70 years old -  
paralyzed in his bed or see  
points to his bed in  
farm

Boonstin

Stach

Smith

Stach

Stach

Stach

Stach

Stach

Stach

Stach

Stach

April 15<sup>th</sup> - Continued

(6) Dr. J. H. Hargrave, 2 1/2 hrs.  
 Dr. J. H. Hargrave  
 From the Church  
 1st. Hargrave has conveyed  
 to the church a large amount  
 of money for the purchase  
 of a new piece of land.

(7) Hargrave - Hargrave  
 with a horse -

(8) Hargrave - Hargrave  
 with a horse -

(9) Hargrave - Hargrave  
 with a horse -

19

April 17/99 -

Hargrave says all the Hargrave plants  
 in S.V. & N.Y. excepting those which  
 are in the Hargrave.

Hargrave says all the Hargrave plants  
 in S.V. & N.Y. excepting those which  
 are in the Hargrave.

Hargrave says all the Hargrave plants  
 in S.V. & N.Y. excepting those which  
 are in the Hargrave.

Hargrave says all the Hargrave plants  
 in S.V. & N.Y. excepting those which  
 are in the Hargrave.

See Hargrave after April 23<sup>rd</sup>

(received April 13/1899 by Koch)

Copy of Chapter caption -  
obtained from Mr. A. Koch  
for the purpose of the form of  
caption)

Dated Sept. 30 - 1899

In consideration of the deed  
I have to sell you my farm  
for \$12,000 (52 acres) and give you  
right to take away the trees of  
which there are out of any place at  
any time at 5¢ per tree. I hereby  
agree to sell the same for \$12,000  
dated 1899 and to be paid on or  
before Oct. 1st 1899 - if done with  
outable this agreement null &  
void on April 1 - 1899.

(sig)

Witness  
G. H. H. H.

Peter A. Koch  
Wm. B. Chapin

March 27 - 1899

I hereby agree to attend the  
meeting of the Board of Directors  
of the National Association of  
Farmers on April 1, 1900.

Witness

(sig)

G. H. H. H.

Peter A. Koch

Boyer, Supt. Schools

Near Longfords - White Hall -  
What about the papers for  
the school - let us see

Supt. of Mill - last September  
knows about the same and the  
#C -

Cataraugus. April 15/99  
Hercules Co.

Mill on right of 13 acres  
for 1879. for  
acres 750000 under station  
of power. Jan. 99 - ~~750000~~  
acres. 12.000000  
all of 70-a tract cannot  
be sold.

Plans of lease of a barrel  
royalty. Minimum royalty 12.000000  
7.000000.

10.000000 for 70-acres -

13.000000 is under lease. 12.000000  
1879. at 4 per barrel. On  
57 acres Hercules holds option  
now the 13 a ~~12.000000~~ a tract where  
at 70.000000.

Call them 75000. for 70-a.  
Make you will & lease hold 56.250.  
57.000000 for 10.000000.

majority of stock held by 4 shares -  
2 dead - only 2 shares in hands  
of Mr. Murdoch of NY.

Continued for April 19-1899  
The 4th (last run by Roman)  
2 of the 4th can't go on for 100000  
either. I don't want to  
find funds must be raised  
from on improvements - mainly is  
because they are no longer  
location - R.R. water. The only  
property left on L.V.R.R.

75.000. or for for Capital  
mfgs - Can get the people together  
in 24 hours. It will any offer.

April 19-1899.

Mt. farm on New Rd

Ab. C. 3. acres ~~100~~ 60% Critique

Very fine alt 70 = acre  
65% of carb of line - near  
Atlas must cross 4 farms  
to get to see from cross  
River

Killer farm on Montauk Rd.  
Chas. Porter. Price \$1000.  
35.000 - 125 acres

25

Cuba April 19-1899,

Mt. farm on Santa C. Y. Y.  
95. acres - 15.700,

Patel April 14/99

Exp Sept 1/99-

With prin exploring -

Pen. Bigg's. April 22/99

Dr. C. R. Green -  
185 acres - 35,000.

Is estimate at Hays Co Station

Green Mt. Bethel, Ark.

P.R.P. 1/16 of one of 6 + P.R.P.

Green Mt. Bethel, Ark.

65. Cont. of line 1. portion of

same 1/16

4 acres flat near R.R.

40 acres of land Green Mt. Bethel, Ark.

50 to 100 acres - bal.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

1/16 for Bal. Rm.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

27  
Cont. for April 22/99.

Duke. Cont. for April 22/99.

here Green Mt. Bethel, Ark.

a large portion of the

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

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Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Green Mt. Bethel, Ark.

Crane & Co must buy outright  
or 20% of stock. Oaks  
has 15 shares from 20 shares  
when in market of stock. 10 shares  
(for) will be sufficient to control with  
me - 35,000.

Chas. A. Wells. M.E.  
President, Reading  
Phila. V.

Call up when I see hotel  
on telephone.

Sturtevantville April 21, 1899.

Mr. Calvert owns farm nearly  
100 a. 1 mi E of S. D. on line S. & W.  
far up on 150. for a - at 100  
some time ago (Kalden & Edgar Menden)  
the Smith like her son with off  
150.00 she refused - asked 200.00  
Smith wanted time to think it over  
I came to 200.00 then later to  
225.00 - gave me conditions  
Obedience, first choice &c. etc.  
She to take it over with family -  
me to call again 25.00 each  
furniture 22.00 (23.00) 24.00 - another  
10.00

of 140.00 - me to pay all  
damages - came 9.00 plan & decided out  
doubt - then saying they will cut  
one down to 9.00 - 10.00 - 11.00 - 12.00

Robt. H. Jones - gave 154.00 - gave  
adjoining Calvert - all 100.00  
Calvert - wants to reserve all 20.  
or 30.00 acres - where his wife's school  
and one can elect method for  
the land - James on road

Continued from April 21/99  
price 150 to 175.00 for Calvert's  
said to be high - all feed & hay  
don't not quality compare to  
land over Calvert.

ag terms of ap as I  
want them I think -  
Annie to meet them  
Tuesday - James Calvert & Menden  
saw Calvert -  
Pellabury Creek  
or a new waterway

- ② Esenough Fry - 1 mi S of S. D.  
1 mi for W. & W - adjoining Fry.
- ① Owen Oberly - 1/2 E of S. D.  
1 mi for R. & W.
- ③ J. H. Hymelshaw - adjoining  
Oberly.
- ④ John Fritz - adjoining Calvert  
on West of Calvert 400  
ft. low place thro his farm



Eastern April 21/99

Be. saw 12 eggs -

1. 12 eggs, empty, he examined  
to day - empty for over  
a week

(2) 12 eggs, some in one  
quite available, some  
by Thomas who brought  
the only one of which  
had some very small  
eggs, the size of a Rice Ball

(3) 12 eggs, some small  
with small, some large  
to match or exceed 4 rows.

We later had fast track to  
Pala for the car and found out  
the name of the  
Baker no room to build  
on nor is he any R.R.

\* 12 eggs as first above.

Be. saw 12 eggs (22) taking  
the road to the river in 29 above

31  
Eastern April 21/99 - Cont'd

12 eggs -

Chas. A. Matheau. White  
be. in low - at first out  
of White's nest - at 1-2 rows  
of new R. of which Matheau  
found 12 eggs at  
Omnipol - Matheau's nest  
empty (Rae)

Atwaterville April 21/99

Bargained with Mrs. Sauer for  
Chest #220, per acre = 103.00

Bargained with Robt. Stone  
at 150.00 per acre = 157.00

Cabesangue April 20/99

Opt. Stomach mdr. can  
Wm. Mohn propat. with  
Wm. Chapman & McKeown

Stomach mdr. propat. 95. ans  
(Wm. Mohn) Propat. has 20  
which expires Sept 1/99. 150.  
per a. which would turn  
over to us any time.

Much get it before results  
of plora are developed

Philippines April 20/99

To see Stomach mdr. propat.  
from Stomach mdr. propat.  
case, or any other  
manner

13  
Odmurder town April 20/99

H. B. Richards 100% of the  
left more money. 100% of the  
April 20/99

Propat. has 20  
which expires Sept 1/99. 150.  
per a. which would turn  
over to us any time.

Stewartville April 20/99

Burgine with Cohart at 220.  
Cohart 100% of the  
left more money. 100% of the  
April 20/99

Stomach mdr. propat. has 20  
which expires Sept 1/99. 150.  
per a. which would turn  
over to us any time.

Washington April 26/99

Closed with Samanthe Clark  
this day at Washington co

103 acres at 22.50<sup>00</sup> per acre

Apr 6 m. fr May 1/99 -

Land butts on to Mr E. R. R.

6 mi E. of Phurg. 1 mi E. of

Stewartsville -

It was found to Samanthe

Clark 100<sup>00</sup> for filing papers

Johnston County on bond

Mr Edson letter to J. E.

My telegram to Mr Edson

Washington April 26/99

When Mrs Calabro got

to camp office she took

out the book all night &

Saw Corinial with bond &c

also Mr. Edson

about the situation the money

was in the bank wanted money

in the bank

in the bank

in the bank

in the bank

in the bank

in the bank

Washington April 27/99

Option

Closed with Samanthe Clark

today at Jefferys

Office Washington

103 acres at 22.50<sup>00</sup> per acre

Apr 6 m. fr May 1/99 -

Land butts on to Mr E. R. R.

6 mi E. of Phurg. 1 mi E. of

Stewartsville -

It was found to Samanthe

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Saw Corinial with bond &c

also Mr. Edson

about the situation the money

was in the bank wanted money

in the bank

in the bank

in the bank

in the bank

in the bank

in the bank



Hinsdale Co. April 27/99 - Cont.

Capt. Stock 75.00  
 Mfgs 56.25  
 Option 40.00

$\$201.25-0$

All above could be sent  
 down. - Stock considerable  
 Mfgs 21  
 Option 11

S. V. R. R. Station White Hall.  
 P.O. address Cataraugus  
 Telegraph " "

Edmund D. Boyer -  
 O. Cataraugus Co.

Location walked on track line  
 "Hinsdale" water (Chippewa)  
 100 ft. level in right for 60 yds  
 with bank of 120 ft above water  
 level - 120 ft now being worked

39  
 Fogselsville's April 28/99

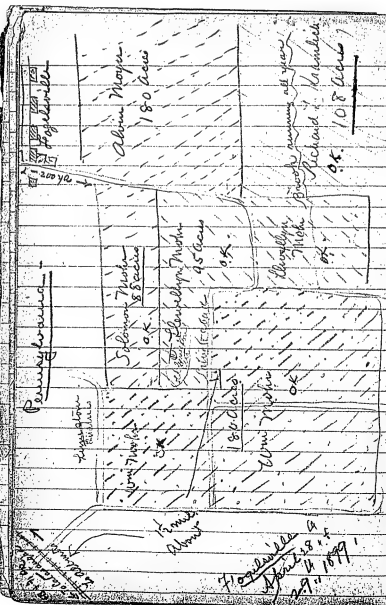
Close to <sup>the</sup> Rich. L. Krauslich +  
 Lizzie J. Krauslich - widows & owned  
 1/2 mile by well after Krauslich.  
 100 acres at 150.00 per acre -  
 1/2 to 1/3 from May  
 1/99 - Exp Nov 1/99

40 - Power to vacate discharge  
 1/2 mi. N. of Fogselsville

This closed today at on  
 Dolanow Motor. 88. Acres  
 at 150.00 per a. - 6 mi. fr  
 May 1/99 - 10. Exp Nov 1/99

Both above in Upper Wisconsin  
 Exp - Chippewa - Pa

Sol Motor - 100 yds. S. L. L. Motor  
 on the South - 100 yds. to edge  
 of village on the East



April 27 - 1899 - 41

Orange Coast

Demencia Capata

Native in

Jessie Lutz - Estate - 1895 - for  
 Cash value, E<sup>n</sup> 1 yr -  
 (Monmouth Co.). 1500 - 5%

Catch basin, E. 1/2 1-2 r-

Stimantorella 2/1500-5%

Firm clay, at Hogbush P.

April 29 - 1899

Kranich Bay Lake on 56 a.

10 - 2/50 for 1898, Royalty 20¢

5/2/99 - Mr E says analysis is good  
to see what Dean does about it

5/2/99 - Mr E says analysis is good  
+ does what Dean ds about it

to see what Dean do about it

Bath - Pa. April 14/99  
back

Grant farm sold 50 a 20.000

Stoner 2 1/2 mi. g. a. = 16,500.  
75 - 22,000

Nearly all a. o. k. - lime & cement  
or o. a. p. o. k. -

Fogelantze - Pa.

April 28 & 29/99  
Slempellin Mohr 95 - a

W. Mohr 150 - a

Alvin Meyer 150 - a

Krauslich (Rich S. Indiana) 1108 - a

Dolaner Mohr 88 - a

Adams. Pa. April 28/99

Frederickburg - Bucks County  
abt 6 mi South of Philadelphia  
Known as "Kimmerer Farm"

Recently sold by Dr. J. C. Kimmerer  
400 - acres - abt 8 mi

S.E. of Reading on the Pike  
9 odd cement & lime stone

Sold Buntam to assume the  
debt May 5<sup>th</sup> 1899.

See Bigelow's report  
Reading April 29. 1899. also  
Map following pages.

Thursday.  
Stewartville Ky. May 4. 1899

John W. Collins = 45 acres  
cross track - (Should include  
track) 250. per acre - would  
prefer to deal with same than  
with other party - (Bipolar)

Strif: New thing to him - don't  
believe he has been concerned of so  
many years ago - went let us know  
just what is what kind - though we were very close  
at the time - James and each other  
only wants to get money that is what  
pay a commission - wants 160 or  
180 per acre - said to be good  
Cement & lime -

Own Plots. Farm 123-a - abt 60 a  
Cement - abt 20 acres of lime stone  
adjoining Cement. some places crops not  
good - uneven abt 5 ft. no decomposed  
rock on top  
Dunk in rocks - 1-1/2 ft deep. no water  
seen - don't see another place 75 ft or 100 ft  
Water which was mentioned by him

Thursday  
Stewartville May 4. 1899  
about 1 mile for road (Pike) -  
Stewartville - got no dirt -  
all cement rock.  
Over man came 90 15 ft  
in two miles + got samples -  
Miles 100 ft apart -  
12 mi S of M. R. R. - narrow  
Canal

On N by Humber  
E " Chas. Clarke  
S " Holly Collins  
W " James T. Fry  
1 1/2 E of Vincennes + find place of  
crops out -  
Vincennes people uncover  
5 ft - some places it crops out -  
5 ft - good lime - clay on top -  
#200.00 per a. a. + 1/2 mile S. or S. W.

James T. Fry N. of adjoining Clarke  
143 acres - abt 40 a. number 20 a line  
1 mi S of M. R. R. + 1 mi N. S. of C. R. R. +  
2 N. R. R. + 1 mi due E of Vincennes.  
90 acres or 100 a. a. = 1700.00 a  
or 1 whole farm 143 a. = 1750.00 a  
of 10 acres more by dam





Sturdevant's of May 1, 199. Cont<sup>nd</sup>

May 10.

Benjamin Cabark 100 - a. - good

profit General & some stone

closed April 27, 199. 225 - for a.

Wanted explanation re. 52 yd from business

6 hrs. p. May 1. 54 hrs. May 1, 199.

Mr. pay damages to - gave bond in 100.

to pay damages. See Apprais

11. Stewart Fritz: adjoins Cabark

begin - abundant in stone but

not building site - off of May

4<sup>th</sup>. 150; per a. - 6 hrs. of

time should it over

12. J. W. Clinic - 110 - 46 - acres of

farm, across brook - good stone

good building site

11 + 12. Plenty of water from

brook. March 225 - 200 - 1 off a

150. 1 - 4 or 5 p. - wants to

have one again (May 4)

14. Mr. Baker tract at Martins Creek

225 to 300 - a. - all stone - no

building site. Quam R.R.

May 1, 199 - Cont<sup>nd</sup> Bigelow

Right hand side 27/19

10. 15 - Dr. B. L. Gross - 50 - acres

adjoins Butler tract - large body

of stone - Can be reached

unless by first offering right survey

across Stammers or Baker - wanted

have to travel over R.P. R.R. + Bel.

See also N.P. R.R. not a desirable

profit

11. 16. Shiner - tract - S of 14 + 15 -

all 20 acres - all stone

no place to build will become

of absorption of the formation

12. 17. Hawk farm - on edge of

outside town limits N.P. R.R. - E -

to R.R. + C.R.R. near this

tract - Have seen Hawk

Heirs (4) + 2 S<sup>th</sup>. They don't

want to give option - want to sell

out right - 107 acres -

Clusick + lime stone on the

large spring -

19. Roll Brown on farm

May 14/90. Ch. and  
 the river S.E. of Carbon. further up river  
 from Carbonville  
 (top of the hill from the top of the bank)  
 (both sides) covered with the same  
 as a mile - no R.R. in the side of  
 the river.

22. David Dorely - 40 acres - adjacent  
 Alpha property on East - near to L. & N.R.

23. Drake farm - 1/2 mi S. of Adamsville  
 5 mi S. of R.R. - alt 1 mi S. of  
 M. & R.R. have cross on main road  
 Adamsville of stone -

24. Fry - adjacent Oberlin - not owned.

25. Humber - adjacent Fry - alt  
 1/2 mi S. of R.R.

26. Fugham tract - 10 acres - just  
 west side of highway from limits on  
 N.E. R.R.

51.  
 Adamsville on May 14/90 -

the river S.E. of Carbon. further up river  
 from Carbonville  
 (top of the hill from the top of the bank)  
 (both sides) covered with the same  
 as a mile - no R.R. in the side of  
 the river.

Analysis of samples taken from same place as above	Sample No. 1	Sample No. 2	Sample No. 3
Calcium	11.650	11.125	19.640
Carbonate of Iron	5.660	6.000	5.260
Phosphorus			
Aluminum			
Carbonate of Iron	50.675	50.256	72.725
Magnesium	2.270	2.346	2.370
Iron	45.180	45.000	40.800
Magnesium	1.081	1.117	1.081

Adamsville of good water (well)  
 line above on adjoining property.

re May 5<sup>th</sup> 1899.

atg - Shock broke. Allentown PA  
option on prop. at Breynelle  
at 15

Stemmy of Calapayna

at 13000 ft. near "Pic" Sept. 1, 1991

at 13:00 per a. Expires Sept 1/99

On C/47. Rpt 1 min

for 2 new unknown

Fogelsville May 5. 1879

Alvin Meyer - not yet heard from  
other hints - looks favorable - 17.5.10

part a. 180. a - Adjoring Solomon  
Mahr - Sely mahr & Kramlich paper  
a

Chadman assigned Wm. & Lady  
Molter as of April 29, 1991  
as he had letter signed J. S. 2  
preceding me in master damages  
if any

David Wm. Mosher to Edward  
Oppenheimer July 1990. I have asked  
Barbara not to place Mr. M.  
file near our home - then back to  
East Street Books at night.

Easton, Pa. May 5<sup>th</sup> 1899.

Bischoff report filed May 1-2-3-4  
+ 5<sup>th</sup> 1990

⑥ Wednesday May 3/99 -

Kennedy - owned by The<sup>1</sup> Iron Co.  
about 2 1/2 mi. from Coplay Sta. (C.V.R.R.)  
on Drantow R.R. 40-a + 6-a

Don't think any line on 40-a  
6-a track good lime stone now  
marked under 10 yr lease from  
Reynolds heirs - (2 daughters, married)  
adjacent near Schlegel Cement Co - by  
lessee David Newsham.

Monday May 1/99 -  
Bigelow Peak

Tuesday May 2/99 -

Through Ice Valley Region -  
1 1/2 NE. of Umanak + 20 on  
toward New Village - nothing

Wednesday, 4 May 4

Thursday May 4<sup>th</sup> 1897  
From Martins Creek to Stocktown - absolutely  
high one mountain of clay. Flints beyond a  
Rialto. Exposed. Below is to be found.

Easton Pa - May 5, 1899.  
 Bigelow starts at Olanville  
 West of Easton 1 mi. + well  
 road N. m. to Nazareth or at  
 about 7 mi. well interest  
 Christiana rock above line  
 of rock great East + West of  
 Naz. - big deposit excellent  
 ground to be a rock at Olanville  
 but to land out in living beds  
 + many old off it is part of granitic  
 calcareous limestone.

Hogelsville May 6, 1899  
 Moyer mill deal first of  
 next rock - Had little from  
 Fisher - wants to put off till  
 next rock.

Arranged to have Britton  
 go Reading next rock again  
 leave off -

Easton May 8, 1899.  
 Bigelow report.

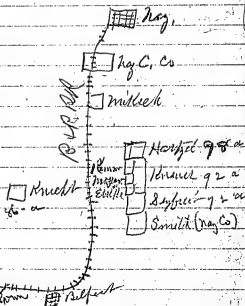
Nashua May 6/99  
 Started Olanville today worked  
 down West Tarrytown Bethelham  
 Bethelham Naz. + Bethelham + Bethelham  
 + 1 1/2 mi. N. of Bethelham + 1 1/2 mi. N. of Bethelham  
 found nothing after leaving  
 Bethelham. Sign elegant at O -  
 but only a good deal of 50 to 60 a  
 but more units up partly.

Monday May 8/99 -  
 today good deal of work at Olanville  
 Naz. Bethelham + Bethelham  
 (all a sign in Bethelham)

- ① John Bethel 98 a 1 mi E of Naz  
 on Bethelham line + amount -
  - ② John Kemmer 20 - a
  - ③ John Moyer 5 - a
  - ④ John Bethel 6 - a
  - ⑤ John Kemmer 92 - a
  - ⑥ John Bethel 72 - a
- all above all from Olanville  
 now owned by John Kemmer + John  
 ⑦ John Bethel 80 - a 1 mi  
 on Bethelham line + amount -

Enston May 8<sup>th</sup> Cont<sup>nd</sup>  
200 yds fr B & P R.R.

(8) Miksha an E edge of Nag -



See previous pages

Stewartville N.J. May 9. 1899

Closed John W. Laine sponser on  
110 - acres - \$200. per acre for entire  
or any portion of farm - 9. m<sup>2</sup>. per  
May 1, 199 -

Closed Ligand <sup>+ Anne's</sup> Frays Options = 7.5¢  
per ann for 142. a minimum 6 ann  
or 200. per ann for us ordinary  
ann as we close to take  
Options to ann 6 mil. from  
mch 15/99 -

Oberle. not at home. Will  
come at res.<sup>to</sup> for a -

Fritz - leaves off -

Show 150 to 175. <sup>00</sup> more willing  
before now - former willing to

At Odessa he was back Richmond  
again - he was at home -

May 10<sup>th</sup> 1899

Between Mount and Kinnaman

Concealing

Old track 50 - 2

1 " 185 - 2

7 mi South of Fleischmann  
+ 8 mi S of Berkeley on Pike  
Plenty of living snakes

It is these up in litigation  
and one saw clerk of game  
at house on 50 a track in  
middle of game mix 60

185 a track with tree

Left with

no R.R. about 7 mi  
Cant build a road with out  
sawed out Oregon chain  
of mountains to Fleischmann  
on P.R. R.R.

Ralph saw Kinnaman  
one of two brothers -

At Altimira crossing  
Pa. Desper -

May 10/99

57

Ralph going to Fleischmann  
by train, 11 mi to Kinnaman  
Schroeder bought close to C & P  
R.R. this night is abt  
4 mi S of Kinnaman

Ralph says Kinnaman will  
visit till Thursday on  
Kinnaman.







Stewartville May 13-1890

I closed this day at Stuartville.  
Stone about 175. per oz  
Silver coin 154 - a  
Jan. May 1898.

Salmon H. H. Cairns station  
150.2 per cu - 9.5% - 116 - a.  
run May 1/99.

Integrated with Mrs. E. from D.T.  
to have Cunningham book  
duplicate of notes sent Benjamin  
Hine. D. M.

Also Telegrams sent Henderson  
London and G. P. M. at U. S. Hotel  
Paris Spain to start moving  
with his floor valuable papers  
Cochran

China  
at China

11.11.1941. Had mail to French  
 Army at Harcourt or Fall & some  
 other. Charlie who reports 2.00  
 per acre -

Home Dunwoody, Moxy 14/99 on  
730 a.m. Train from P. Lums

Kennedy farm (N.P. tracks) - en-  
tailing 2 tracts - 40 a. + 40 a.  
adjoining Schipke Portland Cement Co.  
tract (Brim from Coplay Shallow on  
S. of R.R.) on North side of river  
R.R. - nearly all cement rock  
on the 40 a. tract -

The 4. acre track on South side of Donkey RR. is nearly all line rock.

The driveway R.R. runs between  
2 ridges - one north bound to  
the General & South bound to  
the H a track is now being  
opened up for lime stone & is  
showing up good

*Phinicia*

May 15. 1899

02g. Stone 9<sup>th</sup> 104-12 175<sup>00</sup> W  
H. W. Collins 1-116

(3) Tracy L. Wolfe May 15. 187-

Calcutt 6 ms for May 10 3

Paul Mohr	180	619 -
Carl Mohr	88	4.71 -
Schweitzer	95	
	92	<u>1080</u>

188  
45

Maxatowmy <sup>Pa</sup> May 19. 1899.

Closed black male rank 1 10/10/19  
 (The B. Morgan) - P.O. 10/10/19  
 Aphid on 6.4 - (Eucalyptus) 10/10/19  
 P. 10/10/19

B-18-A-C-7

3. Morgan & Co. Stationer  
and printers are wholesale builders  
of paper to suit from "Mead"

19/89 - 4/1999 Nov 19/99

thin rock. about 1 mi. ~~W~~ E of

2. Expenditure - 7

Rubber property adjacent above

on North - Contains 73, a.  
owned Robert Linn - Railway died

Abt 17 yr ago - East York settled  
to farm - J. M. Smith

Schneekawäse an Drontow + Rijk

Squire Wood - Keele Lodge, Ashbourne  
Feb. 16. On the 23 - A. P. + S.

Only 14 cr. of the 73 - a C + Sines -

Get maps out of Silvering



Maratawney - May 19 - 1899 <sup>Pa.</sup> Cal'd

Franklin D. Mackay property  
11a - ~~San Carlos~~ <sup>Jefferson</sup>  
on Sixth Street (N + E - D)  
Garrison Square - alt. loc.

dist fr RR. as Moogah -

Current & Fine Rock  
all rock 3 mi NW of E 11

all ~~within~~ 3 mi W of Egypt. to 2 mi

*[Faint handwritten notes at the bottom of the page]*

Joe Albright brake - 135 - a

Picks! said not enough. Bunches to do  
line work. do not mind the work. It does

Lump. 200K & 100K - 100K  
\*2-20-00

175<sup>ms</sup> per a. alt right

Take only what we need -

off above Lewis to Lewis  
get creek. This ~~is~~ <sup>is</sup> ~~the~~ <sup>the</sup> ~~same~~ <sup>same</sup> ~~place~~ <sup>place</sup>

[illegible]

admiral John Robinson son of Shiff  
+ John Robinson son of Shiff

+ John's Chris lecture postponed +  
Allright.

11

Highly Bear - adjoins Joe Albright.

alt. a-a - no cement only  
lime - Cast in one piece

Wrote - Check my only lease -



Stewartsville, May 22 - 1897.

Mr. Cahoon says there will  
be a heavy rain tomorrow (Sunday)  
in which time rock cropping out  
on Capers.  
Bigelow satisfied below  
fairly good cement dock - &  
quite a lot of red good  
cement.

Easton May 23 - 1897

Parents bought a lot of  
dirt (about 2000) per acre - 6 m.  
Bigelow says no lime on it  
just much much dirt - but  
fairly good - R - must  
I carried copy of analyses of  
my dirt take it.

I must give bond &c  
for the R. next week at  
the house - it is on CRP of  
N.Y.

Bill Bell

71  
Leipheids May 24 - 1897.

Myron was to go to  
fairly money to today - Diller  
to go to the fair to day  
represent the people of the town

Over the Sabach farms with  
Bridges today - E. J. Bridges  
represent the people of the town

Sch from 7th - 2nd  
22. a. owned by the people of the town

Sabach 7th - 2nd - 2nd  
as agreed with Bridges - 2500 per acre

See prospectus of the  
farm - Graham & Sabach both

of Bethlehem - now - Sch. yesterday  
(May 20)

must arrange with  
Bridges for the 2nd week with  
Sabach on Bethlehem. my  
opinion - no action to be taken of  
the any one else on the 2nd

Sabach farming  
Sch. 10. Northampton - Pa

Sigfrid's Pa. May 24/99

Garrett Farming China Coal  
Bellefleur Pa.  
Farm 120 - acres  
acres of 2.500 or 208.00 pr a -  
Lyndam p. Bellefleur ex.  
Dr. Beth - on farm with  
Sabath May 20/99 - also  
on 1st farm

Which has no option  
on either ex. survey clause.

Rev J. O. Sidenbergs  
Dumfries Land Co. - Pa

Area 203 - a 1/4 mi S.W. of Hopewell  
1/4 mi off C. & F.R.R. - Bob  
Hunka this property good.

73  
Hageruth Pa. May 25. 1899.

Solomon Shurtin R. Krauss  
option - East of Hageruth  
to-day on 97 acres -  
5 mi from June 1. 1899  
Lynns Nov 1. 1899 at  
100. - per acre

P. O. Hageruth  
Northampton Co. -  
Pa.

Krauss - has option on  
his 85 - acres to July 1. next  
to Shaffer people from  
Jan 1 last (1899)

Seayfield - 7 1/2 acres -  
Can best clear, during his  
lifetime life time - property  
entailed.

Heitzel's wife built 99 - and  
mel deal of her own arrange  
with his father's must see him  
first. - Call again next week

Carbon June 3/99

Delant on Sun. market  
till Jan. 1st again  
Frank Stewart (Baltimore)  
are go to probu

June 1/99

68. a. S. V.

Saturday Oct 1/99

Will 200 per a -

245

Stewartville June 14-1899

Geo Stewart Fritz - & bargained  
for his 80-acre farm adjoining  
Cahots - at 150 - per a.

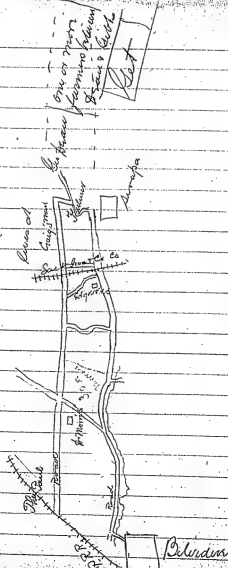
Consolidating his farming  
arrangements with his former  
neighbors leave expenses of the work -

also with

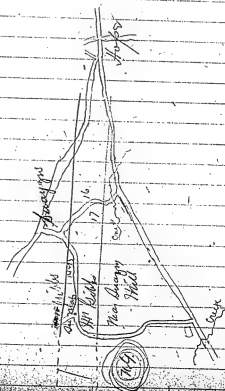
Geo Fritz - for his 80-acre  
farm & his 100-acre farm at  
150. per a - He is looking  
up on his Stewartville farm  
but both will let him  
know next Monday or Tuesday

Oriskany is still looking  
out & across next week to  
Rice -

R<sub>14</sub> or  
 R<sub>07</sub> or



See Breeding letter about  
Sels + Sabach farms of June 12/98





Belvidere June 15 - 1897.

① Pines - Deserchers & C.

② S. Morris - 500 - acres.  
New thing to him - wants to know  
the cov. back - Appurtenances.

③ Springfield farm - 160 - acres -  
owned by David Clark, formerly  
Mgt. Co. Marshall & Halsey also  
Rd. 371, Belvidere, Ill. Halsey  
farmer - also John J. Roseville.  
No lease - can meet any day.

④ John H. Hildbrandt - 100 - acres road.

⑤ John Edgar - 100 - acres -

⑥ Sackawanna C. & D. Co.  
abt 20 - acres -

June 15<sup>th</sup> 1897. Cont'd

⑦ Craig Farm - abt 150 to 60 - a -  
owned by him & John Craig - dead  
on John Craig Jr. - John Keeler -  
Butterville - as to names of Ross &  
Robt Craig - Belvidere town - John Keeler  
& Ross have title - also undivided -

⑧ Geo K. Fulmer - owner - 90 - a  
lives at Carletha - but farm is  
on S. of road, proceeds from Craig  
farm - or East of above Rd.  
East of Lake C. & Co tract -

⑨ Geo. Brown - abt 90 - a - lives on  
near <sup>road</sup> also Geo K. Fulmer, farm  
lives on above 89 yrs old - both these  
are N.E. of Fulmer -

⑩ John A. Hildbrandt - 100 - a

⑪ John Rogers - Belvidere

⑫ Geo. Brown - owned by John Anderson who  
lives on farm at Butterville.



Monday June 16<sup>th</sup> 1899.

To see Senator Oscar Miller  
along Riv. 203 - acres  
Bargained at 137. = 150. per  
a. - Afternoon from one year -  
Miller the Riv. & the river  
River at Easton. by letter see first  
day.

Superintendent Anderson school  
house -

At Hazletville over night -

Hazletville Pa. June 17/99

To see following property owners  
to day with Harbison -

- ① R. L. Seibensperger 203 - acres
  - ② Jas Smoyer 50 - "
  - ③ Edward Smoyer 50 - "
  - ④ J. W. Smoyer 40 - "
  - ⑤ Geo. Hens 100 - "
  - ⑥ Simon Kromer, 80 - " went on bridge
  - ⑦ David A. Butler - Atty. Hazlet - 80 see note
  - ⑧ J. W. Smoyer - under at 15 13 - "
  - ⑨ Mrs Geo Smoyer - 150 - acres 13 - "
- above Mrs Geo Smoyer &  
Shawdon - 100. per a.  
17 - d.

Schneider -

See Rahm Stanton  
J. W. Miller  
Mayor

Rouley farm 79 - acres  
about cor 7 - acres cement  
rock, no lime stone - balance  
limestone for Whittaker mill -  
(now Alpha) limit on top of  
Dunnell farm  
Whittaker lot 35 acres &  
mill mill on it abt 4 acres of  
35 - cement rock - Alpha has  
since lost the 1/2 farm adjoining  
on the south. Dunnell farm  
on left

There is but cor  
acres of original Dunnell has  
stone as above noted -  
All the good cement rock is  
south of Dunnell & has been  
sawed by Alpha - Young farm &  
Jacob Munk farm but by Alpha -  
The David Munk farm & the  
Murphy farm are Capt. Munk's  
has all been sawed -  
No Munk on Munk  
Alpha - Young farm is on  
South of Jacob Munk's corner

85  
David Munk A of Jacob -  
Murphy farm Smith David  
Munk -

June 19 - 199 -

At Laboratory

June 20 - 199 -

At Stockholm - & Newfoundland

Surrounds Dunn - Munk &  
(straight) leaves - at  
Newfoundland surrounded  
Munk leaves -



Belvidere, Ill. June 23/99

Dr Morris - left blank ab.  
 30 apts. Rens. Tobacco house  
 close to buildings - wants  
 survey of swack land etc.  
 telegrapher -

\* Headbamb 136 - a - don't want  
 to deal 75.00 per a. want deal -

Bornell - mill on Clear - Newark

Edgar - 75.00 Come round next week  
 want building

\* Hildbrenth - old 75 to 50. Says  
 he don't want to deal 136 - 2

Angus - not at home -  
 50 or more want this - 0

Shirley -  
 This Taylor - 146 - a - farmer -  
 25 acres - 50.00

Puttville June 23-1899

Craig farm 160 - acres -

Main of John Craig late of Oxford Ind

Lucian D. Craig - 75.00 - Puttville

Left Craig 75.00

John D. Craig 75.00

George D. Craig 75.00

Left Puttville and Edward Putt Ox Puttville

John Craig 75.00 Puttville

Mary Elizabeth Craig 75.00

Widow of Chas Craig 75.00

Isabella Craig 75.00

of John Craig 75.00

will say they for ever.

1-y-r - 75.00

most under lease till April 1 - next

On North by Cassius Lewis & Co

849.00 - 1/2 mile public road to

from Apple to Puttville

With by Lewis Cassius & Co

Containing 160 - a

Scepta June 23-1899,

Joe R. Butler 87-700 - old -

74 - a - all told

Count figures for 94 - a - 15,000.  
This distance from mill & water  
power - which is very good. There  
have the mill on the Reservoir brook.

Fullerton

Feb - 91 - a - 71. not all of  
name - He says he will deal  
but wants to have us sign first -

Belvidere June 27<sup>th</sup> 1899.

PT Morris 300 + a - over it  
with Perkin & Hargrave from  
Regent's man. on S. N. to Public  
road & Morris line at 2

Morris owns a high water  
mark on S. side of Regent's  
river just below the junction  
of the Reservoir creek & Regent's river.  
Morrison took for price of day  
came again & will take it -  
Pate has not at home -

See map of Morris tract  
on next page following.

Over Dr Gross farm &  
Baker's lot & with Regent's  
Brisbane

[illegible]

Hand-drawn map of Martins Creek Rd. showing the intersection with Public Road. The map includes labels for 'Martins Creek Rd.', 'Public Road', 'A.H. Baker', 'No. 10', '40-a', 'Baker', and 'Del. Drive'. A small square indicates the location of the 'Public Road' intersection.

Gross - Euk Baker - A. H. Baker

Public Road

Dr. 136-a

Ent. B. 10

A. H. Baird

Old

de la Rivière



PA  
- Odenville Tenn June 28/99

Bargained to meet Richards at  
his lawyers office. He was  
about owner of Court its appraiser  
1152 acres at 256. per a.  
on his 3 children (minors)  
farm - Richards will see  
know day meet lawyer.

Soaked over South side  
land Co tract at Odenville  
Tenn - houses built lots  
over all - Said to be good  
lime stone in bluff back  
of house to run to Forest Home  
current cost said to run  
3 of orchard front of hotel  
to C.R. Bigelow says  
th is a single deposit of  
good cement but does  
not run off freely.

94  
Easton Pa June 28/99

Closed this day with  
Dr C.S. Gross on his 155 - a  
at Martins Creek for 222.22  
per a till Dec 1/99 -  
Atk before Judge Koch  
Easton -

Went to Philip Smith  
Charles at his lawyers  
office at 250 per - a - 115.22  
Winter met me -

Dr C.S. Gross -  
P.O. Bu Arzyle - Pa

Easton June 28-1899

Kubus farm 80 - a at  
Trout - Bigelow over today

Grants 175 - a

Refuge Kubus leaves on  
farm but some chemo  
with Rev E. A. Yehle - Curs  
at Bangor brother Law of  
Kubus - Yehle will be on  
farm during July & Aug.

Bigelow says

Kubus good line stone  
& Cement

Belvidere June 29-1899

Pave farm 6 to 70 - a - part in town of Belvidere  
& adjacent to Morris on N.E. corner by Mrs  
Bigelow of N.Y. now in Europe. Rocky Paul  
now at South Westport. N.Y. at College & N.Y.  
Mrs. Kingston - Fred Paul now at Albionville  
Kubus then says know where - Fred with  
J. Bodman Paul says so - Fred at Paul  
& says with Henry in Paul - City Park Rock  
Pave for his column in Phila for Paul etc  
at 100 - a - 10 of 60 - a - Fred

Belvidere June 29-1899

Deloria to day Robt Craig offers  
to April 1<sup>st</sup> 1900 - 75¢ per a  
100 - a -

Also arranged agreement  
with Craig mine -

Bamuel farm (Clark, Nevada)

OK at 75¢ per a -

Bigelow with home

Bayer

Boyer

Butter 15,000 - 7¢ per a

Edgar with home -

Nedstrand with home

576 J. in. Wagon? taken the  
6 p.m. from Albionville to  
get to owner & go with Orestes  
to Tagberville for about tomorrow  
morning for Junction -

Robt Craig  
P.O. Belvidere N.Y.  
Mr. Craig  
Belvidere N.Y.

Albion June 29-1899.

A. A. Fisher - 124 N. Main St. Albion  
Bought - Albion June 29, 1899  
To clear abt Albion tract  
of 140 - a - 1/2 mi fr Stanton  
R.R. wants \$80,000 -

After much talk - we talked  
some price. I talked with  
Albion May 14 last.

I told Fisher in presence  
of Bob I would do abt abt  
my self or any place at  
any way to him & Fisher  
wanted me to give him

some thing for his services &  
for money get some thing  
for Albion - I replied  
I shall possibly not  
give you any cash for  
any thing you do under  
any circumstances. Bob  
looked up & heard it.

I said Bob & I would  
look it over tomorrow & then  
talk with me next week  
whether I would give more for 150.

Albion June 29-1899.

Dr. J. W. Erdman - 27-2  
8th St. Albion

Erdman farm, adjacent  
Mills place of 98 - acres  
+ adjacent the little tract of 10 - a  
Mills tract has abt 22 - a  
Cannal rock & about 17 line  
front - ~~200~~ Miles Co has  
cleared 10 - a of line stone  
adjacent Erdman.

1/2 mi tract is abt 1/4 N of  
C + F. Rk. Mills station  
abt 1 mi S of 1/2 mi

Fittler farm (Crown)

Known as Klever farm  
on Stanton Rd. abt 6 mi fr  
Stanton agency - 136 - a.

Fittler paid 25,000. or abt 180 - a  
few months ago.

Fogelsville June 30/99

Alfred Geo W. Sawyer - P.O.  
Westtown Pa = 52 - a - Expires  
July 1<sup>st</sup> 1900 - 150 - 50

Alfred Geo W. Sawyer of 1880 - 50  
1<sup>st</sup> July 1<sup>st</sup> 1900 - 50  
One - a - around Fogelsville  
grain yard -

Alvin G. Meyer - Hiram Meyer -

Anna Meyer -

Clara Reinhardt - wife of

Wm. T. Reinhardt - Dea. Schiffer

Wm. Nathaniel Schiffer -

Upper Maryland - Schiffer Co

Reza Camp - and Andrew Camp -

Wm. Schiffer Co -

Malinda Schiffer - 1<sup>st</sup> Class -

Charles Krause - of C.T. &

Reinhardt - Datab. A.

Helfert - to Solomon

Helfert - Reinhardt -

Wm. Schiffer Co -

P.O. Fogelsville Pa

Fogelsville June 30<sup>th</sup> 1899

I this day extended Wm. Moller  
agreement on his farm 180 - acres  
which will expire July 1/99 - from  
today to Dec 1/99 - on same  
terms - viz 200 - per a -

Fogelsville June 30/99

Raber bro. farm of 73 acres  
near Morgan fence on Danton  
R.R. 1/2 mile - wants 20,000  
or 273 - 25 per acre - on Copley  
Creek - I this day about

Raber bro. farm of 73 acres -

\$250 - 25 per acre - 173 - acres

Ext. papers July 1 - 1900 - P

P.O. Schickerville Pa

Wm. Raber + Maria J. Raber - bro.

of Shoshone Raber - died - Miss John - the bro.

farm to contract for + to sell public or

private only or full power - could not sell

mill built 18<sup>th</sup> 1890 - 50 - mill built the latter one

School farm (Schickerville) 183 - a - offered  
for 100,000 - 50 - per a -



Belvidere July 11 - 1899

Widetrack not home

Edgar off. H. to 50. pr a  
blackie with his wife as to  
how much they should  
have come out. Edgar said  
could not receive price today  
Call again

Thompson not at home - Saw  
his wife. Off. to 40. 1st. pr a

Battle off. H. to 50. pr a  
young one. wants to look well  
his family. 37 yrs old.  
Call next week

Hopfer - not on his range  
See Burr

Boyer (Thos) off. H. to 50. pr  
a for whole farm. 6000. 1st. pr a  
Coke

Boyer (Gen) same as Thos

125  
Belvidere July 11 - 1899

Paul 1st SW. of Dr Morris  
42 - acres - now owned by  
Hagan Kainer. 1st. pr a  
Hagan - see Mr Mackey. 1st. pr a  
Hagan

Saw Mr Mackey today  
Hagan 1st. pr a for 42 - acres  
Hagan 1st. pr a for 42 - acres  
Hagan 1st. pr a for 42 - acres  
Hagan 1st. pr a for 42 - acres

Beaver July 12 - 1899.

Clouds rise of Soda Creek again  
this day at 4.5 p.m. 1st - 1st  
Syrup. April 10 - 1000. Soda. 1st - 1st  
Soda. 1st - 1000. Soda. 1st - 1st  
Soda. 1st - 1000. Soda. 1st - 1st

Barometer this day with 1st  
Syrup. April 10 - 1000. Soda. 1st - 1st  
Soda. 1st - 1000. Soda. 1st - 1st  
Soda. 1st - 1000. Soda. 1st - 1st

Barometer this day with 1st  
Syrup. April 10 - 1000. Soda. 1st - 1st  
Soda. 1st - 1000. Soda. 1st - 1st  
Soda. 1st - 1000. Soda. 1st - 1st

107  
Stewartville - July 12/99.

Bob also with - 1st  
Over 1st - 1st  
Syrup. April 10 - 1000. Soda. 1st - 1st  
Soda. 1st - 1000. Soda. 1st - 1st  
Soda. 1st - 1000. Soda. 1st - 1st

Belvidere July 14, 1899

Mr. Butts - 94-a - very often  
me twice. The after  
Several times - found 124 per  
a - 94-a - 95-90 - 90 - 90  
was also. Nice weather for.

Thurmer will not for price  
till we have first of pond.  
Ment not till we have first of pond.  
of 75¢ per a - 91-a.

I this day closed with 91  
Ment 299.75 a at 100.15 per  
a to Nov 1st next -

See me before any  
of plomations under a plom  
plomations conditions to -

109

Catawba July 15, 1899

Saw J. W. Fuller abt. Rocker  
farm 135 acres - 1/2 paid 15.000  
More wants 20.000. Has expense  
with diamond drill - will send  
me analysis of core + amount of  
man who paid on property.  
(Best mine in N.C.) Must give  
approx. at present.

Went to see Geo. W. Brown at  
his home abt. 1/2 mile north  
see him, could not go, but  
left him at 10.000. 1/2 paid 15.000  
A. Kieppinger.

Lehigh - July 15, 1899  
Saw A. Kieppinger abt. 5  
miles at North corner of 300  
a - all told. Must 300.15 per a +  
most others are worse for all  
Robt. I know of these prospects  
have been over this last spring.  
Bridgman + Kieppinger.



Sunday July 16. 1899.

Wrote to Easton on 7.30 - a.m.  
Home.

Mr. Brisbane & Bigelow  
yesterday to double with 9 days  
& paid that the work also  
to back out in their weekly  
a.m. earlier because of their  
office.

Rev. J. J. Seubergsberger  
Denver. La. Co.  
Pa.

Mr. W. Oscar Miller. (Denver)  
Brooklyn. Pa.

Mr. Sabach on July 19-1899, at 10.50 a.m.  
He said right little + interest  
in his farm sold out by  
Jeff. Kunkle - on Ed of Jim  
Holt. Atty. Easton. Sehs Atty.

Catasangua July 15-1899.

Wrote call me over to his  
office - stand me options  
from Sil - Dated June 15/99  
90 days - Expires Sept 15/99  
15 or 20.000 - not including  
Belden tract of 2K - a -  
also option  
same rate + period from  
on Rutter.

Sil - Feb. <sup>see July 19/99 for</sup>  
Sabach &c.

July 19/99.

Mr. Stenmark  
with Bob & Bigelow -  
maps. &c.

July 20th 1899.  
Phil. Paulson &c.

Phil July 20/99

Henry H. Paul 1879  
 9127 Chestnut St. City  
 Wash Co. Pa.

Reading July 27/99

Rev J. D. Greenup, Pa.

150 Penna. - Oph. 5 May 1900  
 not given possession till  
 May 1, 1901. - Was for what  
 but the case was with his  
 father this week and  
 with me.

Belvidere Range July 27. 1899

Paul East 112 - a -  
 Fox Thomas ok 2.44 "  
 Spinning from ok 4.6 "  
 Hildbrand 13 "  
 Hildbrand 10.8 "  
 Spoke C & D Co 2.0 "  
 Guler 9.3 "  
 Craig from ok 1.50 "  
 O'Brien from ok 9.0 "  
 Van Horn 1.75 "  
 Marshall 1.75 "  
 Marshall 200 "  
 J. Hildbrand  
 Hildbrand & J. H. Cook 100 -

Catawauqua July 28<sup>th</sup> 1899

Geo. Brown - has aphonics on  
following:

Schmidt farm - 100 - a -  
in number 25 -  $\frac{25}{100} = .25$

550.00 per a - on Wagon R.R.  
3 mi. Cata in Egypt R.R. -  
Caplay creek north of it.

Brown farm 100 - a - 500.00  
Pine a - on Egypt R.R. 1/4 S. 7 80.00  
on R.R. one farm between Schmidt  
& Brown farms. owned by American Cane Co. & others.  
George farm 80 - a - 500.00  
per a - aphonics on U.S. & Co.  
on Smith R.R. & Caplay creek  
in Egypt R.R.

All above aphonics  
springs all Sept. 1/99. Each  
aphonic contains disease for  
residual. Some for aphonics  
that C. D. Brown is interested in.

Cata. July 29 1899 - Cont<sup>d</sup>  
Brown wants 5000. for  
George & Brown aphonics - by Sept  
1/99.

Belvidere Aug. 15<sup>th</sup> 1/99.

On the Belvidere Range  
with Yates.

Belvidere Aug 16. 1899

Steen farm 160 - acres  
owned by Major Steen on  
farm near Rushing L. Pa.  
see map here. <sup>farm</sup>  
runs across R.R. to  
the river. & is now farmed  
by one Frank.

Van Kirk farm. abt 88. acres  
line between Maumata Creek &  
Blountville. It is now farmed  
by one Strickland. 24.9. 10  
acres. He used to abt  
20. ac. on the N.E. side of  
Charles farm. runs across R.R. to  
the river.

Chas. W. Cady. abt 83. acres  
N.E. bank of Dr. Morris on  
road.

Bogart farm. out on N.E.  
line at Beranton right away  
to S. corner.

Belvidere Aug 17<sup>th</sup> 1899 <sup>117</sup>

Over Belvidere range with  
Jules & Brisbane as far  
as Marshall into Clark.  
& around Maumata Creek.

Belvidere Aug 18 - 1899

Met Jas. R. Butts ex Judge &  
Shipman's office to go over  
option ~~to~~ for same by  
agreement by all North  
of Road. But Mr Butts  
finally decided after he  
found the line. He also seeing  
but sell his entire farm  
out right & at once for cash  
no option.

This day drove with Chas W.  
Cady on his 83 acre farm  
on Belvidere range at 80. 3  
per a. option from Feb 15. 1900  
(Jas. Morris)

Bethlehem Pa Aug 18-1899

At Bethlehem to see Mr  
Graham Edgar and his  
brother Edward paper and  
Bath. Pa. - sent Bigelow  
(told Mr Edison on 19th)  
Edgar's office - office  
Aug 18/99

Allentown Pa. Aug 19/99

To meet Brewster & send  
Sawyer's Mary office  
at 10:30 AM. 19/99  
sent 1. 1899. Then  
back to laboratory &  
met over matters with  
Mr Edison in chemical  
room Sat afternoon  
Aug 19/99.

Blindens Reins. 119

Deas - Van (Wash) (Wash)	Clark + Young (Wash) (Wash)
Dr. Morris	Vankin - (Wash)
Bonell (Clark)	Carve -
Wildebrand P.	Bogart
Edgar -	Bogart -
Sack	Bogart
Hullmer	King H. Craig
Butts	Geo. Deas -
	Robt. Craig

Van. Hoge -  
Marshall, Gibbs  
Jas. Wildebrand  
Ruth + Mrs R. Cook

Stone

Hulger - Punks farm

James H. Miller - "Northway"  
Edward Miller - "D.V."  
of Andrew Hulger's Est -

Albion Hulger - Easton

Midway - 5 or 6 children

Grayson - "Sun of the"

County - "Sun of the"

John - "Sun of the"

John - "Sun of the"

John - "Sun of the"

John - "Sun of the"

John - "Sun of the"

Pursel -

Remond Koraubauka 121

Sept 1 - 1899.

At Loxanton I see Remond  
also from just back in about  
with his wife who owns the  
farm.

I am sick at Manuka  
Chumt also from my 20-22  
years - think it over

Sept 4<sup>th</sup> 1899 - Belvidere

How RT Morris -

Neglecting with

Dr August Zoller ~~and~~  
Mrs Dawson  
Haugen

Sunday. Sept 10. 1899.

At Clayton with Bigelow  
exam. property there sedimentary  
by Mr. Philadelphus.  
Said too deep (10 to 15 ft)  
no surface indications of  
limestone rock. Though found  
in clear proximity to Ketchikan &  
other Quaternary hills. Some  
little doubt as to right property  
but think we saw right one  
according to description -

but August 1899 - reflects

123  
Eaton Pa - Sept 11 - 1899

John Bond & Morris - old  
mine and for which James  
C. Bondage - was used by his  
name. Letter later.  
Sept 11. 75 ft. a  
High later 100. To 800 ft. a.  
band - changed back of  
explorations of Bond & C.

Belvidere Sept 14, 1899.

Bargained with Mr. Jones  
at 45¢ per a. of tons.

Now as Mrs. City. Large

Opinion will not prejudice  
his other work.

City. About General  
large.

At this point

Thurs. 14th

125  
Belvidere Pa Sept 14/99

Across the river

The large 2 entrances

See below

Belvidere Sept 27/99  
Closed the gates

Belvidere Sept 27, 1899.

Left opinion with Paul  
at Belvidere. To be

Recorded also the first  
opinion in both respects



Rank of A. D.  
Soldier

Recd  
 of A. D.  
 Friday  
 the 10th  
 of the month  
 of Oct 16/99  
 127  
 Oct 3<sup>rd</sup> 1899

Barstow this morn. with  
James & Bullman. no. for  
large room in brick building  
along historic at \$6.<sup>00</sup> per  
mo commencing Oct 1/0  
Bullman is highly recommend-  
ed. & I found in general  
an excellent place with  
Burgess, who got 14 months  
prison. Oct 4<sup>th</sup> <sup>they</sup> were in the pen.  
John Kane - inmate  
(monthly tenant) \$5.00

Stewartville Oct 3<sup>rd</sup> /99

At N. V. saw Parcel  
 1/2 up with Barn - close  
 Saw Tray & he consented to  
 stand up with jaggy 1-1200  
 also active Howard Smith  
 under 2 of - records to  
 the 1/2 of 1000 -

also saw Parkhurst  
 he will talk at once with  
 his wife -

back to N. V. Oct 4<sup>th</sup> /99

Saw A. Titter at afternoon  
 saw wife - amount 200 -  
 for a box 18 a - press  
 to R.R. then to 170<sup>th</sup> for a

Oliver Boyer - Representing Anne  
 (column) amount 200. then 170<sup>th</sup> for  
 for a for 2 friends and 45 a  
 for a - also saw with  
 to the 1/2 - Stone amount  
 170<sup>th</sup> for a and 15 a

N. V. Coast Oct 4<sup>th</sup> /99

Chas. Chatoyer - same address  
 Eli for C. Z. Mack - Washy  
 Mack - 1/2 of same amount  
 found 1/2 of same Stone for 1/2

Harry Chas. will clear  
 away

Jim Hulse - same lab in  
 N. V. 2/3 of 1/2 is interested  
 in his wife right  
 after at her death right  
 to be sold - see well of 1/2  
 Hulse

Easton Oct 4<sup>th</sup> /99

Saw Buchanan - same lab  
 after on this road and on  
 from Clary below bridge  
 of in part  
 for on all - will let same  
 amount in same way

100  
Fogelsville Pa. Oct 10-1899

Agreed with Salomone  
Moser to extend his  
lease from Nov 1-1899.  
to Jan 1-1900. Said  
extension to be prepared by  
me + Salomone Moser will  
execute it. (Richard present)

I this told Richard R.  
Kramlich I would not  
issue, as was off him  
disposing of his property  
as one had seen would it.

Masataway Pa. Oct 10/99

Agreed this day with Shiff  
Moran to extend lease  
of Morgan <sup>mine</sup> to Jan 1-1900.  
19-99.

101  
Stewartsville N.J. Oct 14-1899

I this day closed office  
with Anna E. Blair on  
apt 80. - a of her Caleb Kent  
Jury - at 100<sup>th</sup> per acre  
to Jan 2-1900.

~~Remains~~ ~~Concess~~

1 Mile N. from Washington <sup>S.W.</sup> at

Pleasant Valley above

Mill pond - some evidence

of Cornish rock around telegraph

pole - might pay to sink

prospecting shaft - No outcrops  
seen

S. V. Oct 17 - 1899 - 183

I this day obtained  
reduction of rental  
for frame building rented  
from Jno. Fullerton, Oct 4  
199 at 60 to 3.00 per  
mo -

Stance W.A.M.  
memo of above Nov 1/99

W.A.M.

Elizabeth Otis farm  
Greenwich Township  
Consisting of  $154. \frac{33}{100}$  acres,

was sold back to Elizabeth Otis  
2 back of sd farm

1<sup>st</sup> tract contig.  $31. \frac{35}{100}$  acres  
" " "  $5. \frac{60}{100}$  "  

---

 $36. \frac{25}{100}$  acres.

$154. \frac{33}{100}$   
 $36. \frac{195}{100}$

$117. \frac{37}{100}$  acres in Dutch Co.

Cash  $\$175.00$  per acre 9 mo  
154. acres - from May 1. 1899

1317

John W. Oliver  
 $52. \frac{72}{100}$  acres at  $\$150.00$  per acre  
 $\$7,908.00$  Shampo "4"

Franklin Township -

Samantha Corbush

$102. \frac{79}{100}$  acres  $\$150.00$   
per acre  $\$15,418.50$

Samantha Corbush  $\$13,848.92$

John W. Oliver Donates under  
will of Jean Lamb - dec'd  $\$1,576.25$

Intgr  $\$1,500.00$   
Sub  $78.75$   

---

 $1,578.75$   
 $1,3,848.92$

$\$15,418.50$

Land A. Beyer - under lease  
from John Britts

Swamp Area # 9,800.  
provided acreage is 80.2<sup>2</sup> acres

Actual area is about 80.45<sup>2</sup>

So. 4<sup>1</sup>/<sub>2</sub> 80.45<sup>2</sup>

# 9,800. for 80.20 acres is at rate  
of \$ 121.2<sup>5</sup> per acre

80.9) 9800.0

Shad area 9.45 acres  
80.45 x 121.2<sup>5</sup> = \$ 9752.1

137  
Shad and Fitter, under lease  
from John Britts

Area ~~Shad~~ = 90.65<sup>2</sup> a

but after deducting <sup>Map 5</sup> 10.0<sup>2</sup> RR

RT of my previously sold of  
13.27 a - Riverbank

Sh. 64 acres Sold  
Trans. # 17,705.<sup>00</sup>

Wagon road ~~has been~~ added

Sold from above to

John W. Clume. 40.7<sup>5</sup> acres

at 40.<sup>00</sup> per a = \$ 2,902.<sup>50</sup>

Sarah A. Beyer - under will  
from John Britts

Simple sum \$7,800.  
proposed average is 80.2<sup>2</sup> acres

Actual area is about 80.45<sup>2</sup>

So 80.45<sup>2</sup>

\$7,800 for 80.20 acres is at rate  
of \$121.1<sup>2</sup> per acre

80.9) 9800.1

Short area 9.45 acres  
9.45 x 121.1<sup>2</sup> = \$1145.1

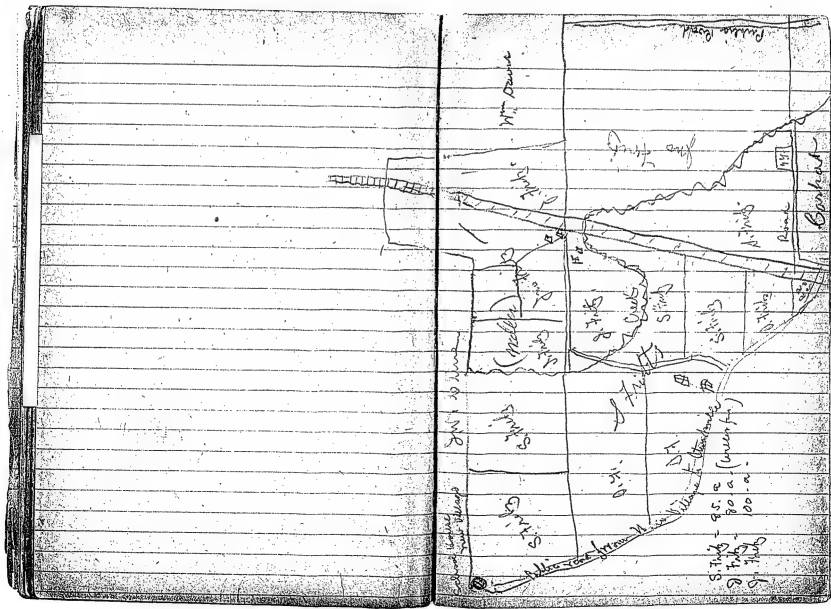
137  
Shirley Britts, under will  
from John Britts

Area ~~of farm~~ = 90.65<sup>2</sup> a  
but after deducting <sup>meadow</sup> 2.1<sup>2</sup> a  
Pt. of my property sold of  
3.27 a - Recovers

Sh. 64 acres sold  
Trus. \$ 12.702<sup>2</sup>

Wagon road ~~has been~~ added  
Sold from above to

John W. Clouse - 40.7<sup>2</sup> acres  
at 70<sup>2</sup> per a = \$2,849.50





Stewartville Oct 12-1899

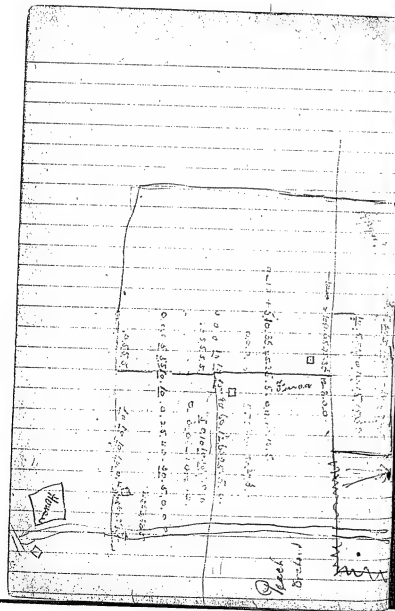
Met R. P. Cummings here  
and Zions property 1 1/2 mi. North  
of Oxford station on D.C. track.  
Contains 202 acres known  
as Kings Park property.

Operated, each by the  
Betha Mining Co. - (Mrs. Wilson  
of Vandover family -)  
No lease or other arrangements  
w. D.C.

Cummings says he  
spend \$4000. on property.  
Main shaft 100 ft. deep  
Zions shaft 100 ft. deep  
Tunnel in 20 ft.

From Oxford to Bridgville  
Mentioned the ore





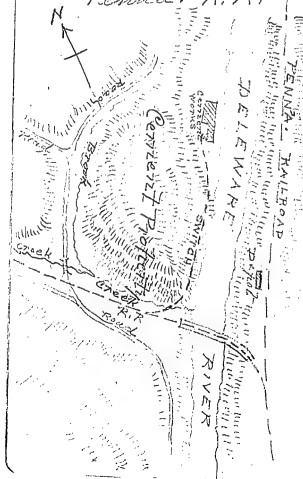
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**Edison Portland Cement Company Records  
Plant Operations Notebook, N-99-07-05**

This notebook covers the period July-September 1899. It was used by an unidentified author for notes and drawings regarding a site for the cement works. The selected entries concern Stewartville and other locations in New Jersey, as well as several places in Pennsylvania. The spine is labeled "Prospecting - Stewartville And Surrounds." The pages are unnumbered, and several pages have been removed from the book. Approximately 70 pages have been used.

Approximately 50 percent of the book has been selected. The unselected material consists of data relating to drill holes and limestone samples.

Baker & Co.  
Gross Properties  
opposite Martins Creek Sta.  
Pennla. R. R.



Martins Creek July 5-99

Baker & Co. Gross Properties  
on the West Bank of the  
Delaware River opposite  
Martins Creek Depot  
Pennla. R. R.

Description of Land -

The knob containing  
the Cement Rock here is about  
150 feet high made up  
almost entirely of limestone  
and Cement rock. The  
Delaware River washes the  
East side of the Knob.  
A Creek skirts the South  
Breast of the knob and a  
small brook the West side.

That Portion of the  
Knob adjacent to the river  
is owned by the — Cement  
Co. The West side of the

Martins Creek

Knob facing the Valley  
is held under option by  
the Edison P. C. Co.

Material

The rock on the East  
side of the Knob along the  
river has the appearance  
of being high in lime.  
That on the West side of  
the Knob shows better  
material.

Water  
Water may be taken  
either from the River or  
Creek.

Site for works

A piece of gently  
rising ground abutting  
on the river north of

Martins Creek

Cement Co. Property  
is the only apparent  
available site for a  
works in this vicinity.

This property is only  
approachable over the switch  
and property of the  
Cement Co. and is not  
at present under option  
of the E. P. C. Co.

#### Building Material

Good Lime Stone from  
the adjoining hills E. of Daniel  
from the Calaveras River

Accommodation for men  
None

July 4/99  
Fogelsville Pa.

Description of land

The property under option here is high rolling Farm land.

Material

There is a large <sup>in the body</sup> amount of material here, of apparently good quality, rising about 40 to 60 feet above the level lands which form the natural building site.

The entire formation dips from N.E. to S.W. at an angle of 15 to 20° and the composition appears to change from N.W. to S.E.



Fagelsville Pa

so that immediately  
acrossing the line  
under station on the S. E.  
the rock merges into  
"lime stone".

Along the valley of the  
creek, on the west side of the property  
there is a considerable  
deposit of material of laminated  
structure probably partially  
disintegrated cement rock.

The surface soil is very  
light over the high lands,  
and the solid cement rock  
rises close to the surface  
over a large area of  
the property.

The cleavage lines trend  
easterly & westerly.

Stream measures are —  
a. base 18 1/2" x 36"

Fogelsville Pa

### Shipping Facilities

The Shipping facilities consist of a branch of road connecting — — —

### Railroads

W. & A. R. R. & P. R. R.

### Water

The present apparent available water supply consists of a brook which runs thro' the west side of the lands with a flow of 220 gallons per minute; the brook is fed from springs said to come

Fogelsville Pa

from gravel. To make up the deficiency of this water supply I would suggest an experiment in deep boring -

The brook may also be dammed and a storage reservoir formed at small expense. (Land owners follow up object to this water being taken)

Accommodation for men

The little village of Fogelsville has a population of 500 to 700 and two hotels. The country immediately

Fagelsville Pa

Surrounding is dotted  
with Farmers homes  
from which a good  
supply of help may  
be drawn

#### Building Site

A low almost level  
plain extends from  
the rail road to the  
lands under option giving  
unlimited room for  
works and tracks at  
a minimum expense for  
grading

out  
Fogelsville - Notes

sample 206 supposed to  
be shale?

Samples 145-146-147  
From Breunlich place  
taken from under shale

## Stewartville

### Lands

The property here under  
option is rolling valley  
land all under cultivation.

### Material

The material here  
seems to vary very much  
in quality alternating between  
Carbonate of lime - Argillaceous  
lime stone and Dolomitic lime  
stone, rising and falling,  
appearing and disappearing,  
with no apparent  
regularity. The entire  
formation dips to the  
S. by S.E. at varying angles  
from  $45^{\circ}$  to  $70^{\circ}$ . The high  
portions of the lands rise

25 to 60 feet above the  
bottoms of the valleys at  
varying slopes from  $5^{\circ}$  to  $30^{\circ}$ .

The surface soil varies  
very much in depth, <sup>from 0 up</sup> increasing  
and decreasing abruptly  
indicating a very uneven  
surface of the rock beneath.

The cleavage of the  
rock trends from East  
to West which probably  
corresponds with the  
trend of chemical  
composition.

(Shrewsbury)

Shipping Facilities

The Eastern branch  
of the D. L. & W. Ry. Passes  
through the property from  
East to West

The Lehigh Canal parallels  
the property running E. & W.  
 $\frac{1}{4}$  to  $\frac{1}{2}$  mile distant on the  
north side,

Water

The Pohatony Creek  
affords an ample supply  
of water at the East  
end of the properties &  
the Canal is convenient  
to the West end.



(Stewartsville)

Residences for Men

The Village of Stewartsville has a population of about 500 people, two small hotels or inns. The Country surrounding is quite sparsely settled.

Building Site

The Properties under option affords two fairly good sites for building adjacent to or approachable by the Railroad, one adjoining Stewartsville on the North West, near the Canal, - the other North

west of New Village  
Depot between the  
Railroad and Creek  
The latter <sup>little</sup> canal  
necessitate considerable  
grading. These  
sides are <sup>rough</sup> convenient to one of  
the two principal bodies  
of material under offer,

Odenwelder or West Easton

The Cement rock here  
lies in a knob rising  
about 100 feet above  
the Lehigh river.

Odenwelder is a suburb  
of Easton and the property  
in question has a number  
of houses built on it  
and others in course  
of erection.

There is not sufficient  
material in sight to warrant  
the erection of a works  
of large capacity, and there  
is no ground convenient  
on which to build a large Works.

Belvidere, N.J.

Lands

The lands containing the cement rock in this vicinity are mountains rising on the Gibbs & Craig farms to an elevation of 470 feet above the Delaware river and 300 feet above Beaver creek in the adjoining Valley. The contemplated options embrace properties covering a distance of about five miles extending along the North banks of the Raritan and Beaver creeks

Belvedere

Material

The Cement rock in this vicinity varies in appearance and different Properties. From dark blue hard stone on the Morris tract to a soft brown stone on the surface of the Gibbs and Craig Properties. The Cement rock on the latter Properties is very massive rising to the crest of the highest knobs.

A ridge of lime stone intervenes between the Cement rock and the Request Creek. For

Belvedere

a distance of two or  
three miles East of  
the Dr. Harris tract.

The Entire Formation  
in this vicinity dips to  
the S. by N.E. at varying  
angles about  $40^{\circ}$  to  $60^{\circ}$ .

The Surface Soil  
consisting of gravel and  
loam or yellow clay  
varies in depth and  
the different properties  
from 0 upwards.

The cleavage of  
the rock is easterly  
and westerly which is  
probably the result of  
chemical composition.

Belvidere

Shipping facilities

Lehigh & Hudson R.R.

Del. & N.J. R.R.

Pennsylvania R.R.

Belvidere

Water

Water may be taken from the Pequest Creek or Delaware River as may be most convenient to the site selected for the works.

Accommodation for Men

Belvidere has a population of about 1800 to 2000 with several hotels.



Belvidere

Site for works

a stretch of level  
ground bounded by  
the Pequest Creek on  
the North, the  $\frac{2}{3}$  & 1/4 H. Ry on  
the South the City of Belvidere  
the West and hills on  
the East affords a  
Favorable Site for  
a works, approachable  
by the railroads,  
convenient to water and  
power for men and  
convenient for a track  
or tracks to the cement  
lands

Exford Township Warren Co Lot N<sup>o</sup> 2  
Mary Hess - Widow

Beginning at a stake at the road leading  
leading from Belvidere to Hope thence  
N 36  $\frac{1}{2}$ ° W 5.66 Chs thence N 59  $\frac{1}{2}$ ° E 2.72 Chs  
thence S 43  $\frac{3}{4}$ ° E 6.50 Chs to a stake in road  
thence along road S 40  $\frac{1}{2}$ ° W 4.75 Chs to place  
of beginning Containing 2  $\frac{1}{4}$  acs. -

C. W. Earpe Oxford T.P.

Beginning at Cor of RR lands  
of the Warren RR Co and  
Lands formerly of Amos W.  
Cramer and running as  
the Middle Pointed 1878 - South  
 $36\frac{7}{8}^{\circ}$  E. 48 chs 12 links to Cor  
of Joint of Lane and Public  
road leading from Belvidere  
to Scripitor, thence down said  
road S.  $65^{\circ}$  W 30 chs 2150 links  
to Cor in said road thence  
N.  $11^{\circ}$  W 26 chs 25 links to a  
stake which bears N.  $56\frac{1}{2}^{\circ}$  E.  
from the Belvidere Water  
works thence N.  $14\frac{3}{4}^{\circ}$  E. 8 chs 20 links to stake  
thence N.  $31\frac{1}{2}^{\circ}$  W 19 chs 65 links  
to stake on hill in the line of  
the R.R. land, thence N.  $23\frac{3}{4}^{\circ}$   
E. 2 chs 94 links to a black  
oak

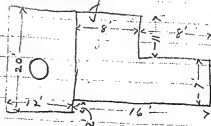
thence  $N^{\circ} 53^{\circ} E$ . 2 chs 1.6 mls  
thence  $N 74\frac{1}{2}^{\circ} E$ . 2 chs 37.6 mls  
thence  $N. 66\frac{1}{2}^{\circ} E$ . 1 ch. 33 mls  
to place of beginning  
containing 83<sup>20</sup> acls  
Surveyed by E. G. Ware

**Edison Portland Cement Company Records  
Plant Operations Notebook, N-02-01-23**

This notebook covers the period January 1902-May 1903. It was used by Cloyd M. Chapman for work undertaken at Stewartville on behalf of the Edison Ore Milling Syndicate, Ltd., and related interests. The notes pertain to briquetting experiments, furnace trials, kiln runs, and other tests using ores from Ogden, New Jersey ("Edison concentrate") and the Dunderland region of Norway. The front cover is labeled "Furnace Book." The book contains 193 numbered pages. Many pages are blank; one page was removed before the book was paginated.

Musical Wood experiment  
 Steam pipe line from boiler  
 to black furnace -  $1\frac{1}{2}$ " pipe  
 covering for steam line  
 trap " "  
 Superheater " " "

Building -



# Mincal Wool experiment

Two more burners for furnace

Holes cut for " in "

Furnace for Superheater

1/2" line to Hot furnace

3" Air line " " "

Fire brick made adjustable

1/6-23-02

Blast furnace trial #1

Did not run very slowly with minimal draft for four hours then slight blast for two hours then put on about 5" blast (by water gauge) and 4 charges as follows:

Yellow pine	83 1/2 lbs
Ammonia	27 1/2 "
Soda	2 lbs 11 1/2 oz
Coke	17 lbs

When last charge was put in furnace it suddenly froze over stopping all draft. Had to let out bottom and clean out furnace. Bottom of furnace was at level of lower tap.

1/24/02

Blast furnace trial #2

Did more quickly than yesterday getting up to full blast in about five hours. Used partly fused charge taken from furnace after last trial with addition of 2 lbs 11 1/2 oz soda and considerable larger proportion of coke. Did furnace very gradually and cautiously to insure against freezing.

Charge melted down but did not become liquid enough to run from tap hole - very little came out - remainder too thick and caked with coke to run. Used lower tap - not hot enough.



1-26-02

Blast furnace trial #3

Fired as yesterday using same charge over again but building bottom of furnace up to upper taps hole. Added little more soda.

Charge melted down but was too thick to run from furnace. Not hot enough to be liquid.

1-29-02

9

Blast furnace trial #4.

Started fire with wood at 8 AM. Heated slowly until 11 AM. put on fire coke and heated at moderate blast until 1 PM. then fired up rapidly until 2 PM. when had a strong heat with good coke.

Kept tap hole open with charge which was same as used in run to 1 (fresh) was melting down at about 2:30 - then closed tap hole until some of charge was melted and tried to tap off - very little slag was obtained because it was not fluid enough to run.

Furnace bottom at upper taps hole.

## Black Furnace Trial #5

Furnace bottom level with upper tap hole. Good Ca. coke. Went slowly to white heat - fed half broken window glass to half coke. Kept tap hole open. Glass ran from furnace without clogging tap hole but not fluid enough to catch in ladle and pour again. - At this kind of furnace - fire brick common - in this place - had to shut down. Before shutting down started to feed slag from B. F. trial #3 and it melted down but was not liquid enough to run from furnace. Soon after this began humming had to stop on account of noise in burning. The glass after cooling was very brittle.

## Black Furnace trial #6

Had lining of furnace removed and Magnesia blocks - basic - put in to prevent silica getting into slag.

Fired up very slowly and fed half slag from trial to 4 and half good quality coke. Bottom of furnace level with upper tap hole. Got good heat before beginning to feed. Kept tap hole open. Slag melted but would not run from tap hole - opened tap both up higher and let black come thru with the slag and it flowed freely as well as glass did in trial #5. The slag after cooling was very brittle.

12-5-02

# Blast Furnace Trial #7

Heated furnace slowly and until very hot. Then top hole opened - bottom  $1\frac{1}{2}$ " below top hole.

Increased up charge to .027 and wet the stuff mud - fed 66% coke per ton to charge.

Charge nearly drop over at one time - choked off draught. Slag flowed from furnace about as thick as glass and was very brittle when cold. Charge same as on trial #1.

2-8-02

# Blast Furnace Trial to 8

Furnace conditions same as last trial. Charge not ground up - fed about 50% coke to 106% charge - was not enough coke - charge would off at towers - had to stop run.

Up to time of cooling the slag ran well - best results yet obtained.

13

2-9-02

# Blast Furnace Trial to 9

15

## Hot Blast for Capsule

Height of furnace top from ground

10'-0"

Height of flare on top of furnace

3'-3"

Diam of stack inside 14"

Diam. flue outlet 12"

Center of furnace to outside of

building 15'-6"

outside Diam. West ring on capsule 3'-11"

Diam. pipe of " " " 6"

Height of " " " " " 5'-2 1/2"

Height of air discharge when  
vertical 3'-0"

Test of 4" screw conveyor  
with ground glass  
wt of box 4#

10 turns delivered (above):	9.5	lbs. net
20 "	17.5	"
10 "	8.5	"
20 "	17	"
20 "	17	" (fairly)
20 "	17	" (very fast)
20 "	16.5	"
20 "	17	"
20 "	17	" quite slow
20 "	16.5	" very slow
20 "	17	"

$$190 \overline{) 161.0} \quad 8473$$

8473# per rev.

10.00# per hour  
16.6# " " "

19.6 rpm to deliver 1,000 per hour.

Test of 4" screw conveyor  
with Edison Conc.  
wt of box 4#

10 turns fairly fast	25.5# net
20 "	51.5
20 " fairly slow	54.
20 " fast	54.5
20 " fairly fast	52.
20 " very slow	47.
20 "	52
20 "	46.5#
20 " fast	54.5

170) 437.5

lbs delivered per rev. 2.57

20000 lbs per hr

333 " " "

130 rpm. to deliver 10 tons per hr.

2" screw conveying powdered coal  
delivered 2# 100# per 50 rev.  
or 100# per hr. for every 41 rpm

Sprocket wheels to be  
had -

No. of teeth -

6	18	48
7	20	58
8	22	
11	30	
12	38	
14	45	

To feed 5 tons per hour  
miser to run at 55 rpm  
low feed to run at 65 rpm  
grain feed " " " 98 rpm

Countershaft to run at 100 rpm  
6 tooth sprocket on counter to 58 on glass feed  
12 " " " " 18 " low  
22 " " " " 38 " miser

on motor 5" } rpm 90  
on 1<sup>st</sup> Counter 34" } rpm 132  
on " " 24" " 132 to feed screw  
on 1<sup>st</sup> " 12" } to 2<sup>nd</sup> Counter  
on 2<sup>nd</sup> " 16" } " 132 " 1<sup>st</sup> Counter  
on feed screw 6" " 530 to 1<sup>st</sup> "

4/30/02

## Kiln Run to #1

Final of rotary kiln as a  
stationary or continuous kiln.  
Brick over bottom of kiln  
to make level bottom 20" wide  
about. Moulded brick in place  
in furnace and heated with  
poor quality coal.

Ran two of each kind of  
brick - one set near front of  
furnace & other set near back.  
found that back brick  
baked fully as well as those  
in front. First two brick  
width were hit by coal flame  
melted down a considerable

The different forms of brick  
and shifted tried here: -  
#1 Brick 5"x5" at top 7"x7" at base & 6"  
high containing 5% glass and 1/2%  
clay in Edison Comb. It was  
not baked hard enough - very soft  
in center & on bottom.

#2 Brick same as last with hole  
down thru middle 2" diam at top

and  $1\frac{1}{2}$ " at bottom - it  
baked better than brick #1  
but was still soft on bottom.

#3 Brick  $6\frac{1}{2}$ " square &  $2\frac{1}{2}$ " high  
of same mixture - baked  
soft on bottom.

#4 Brick 3" sq at top & 5" sq  
at base & 6" high of same  
mixture as #1 - baked hard  
on top but soft on bottom.

#5 Brick of same size as  
#1 of Edison Conc, 5% glass  
and 1% clay - soft in center  
& on bottom.

#6 Brick same size & hole as  
#2 of mixture same as #5 -  
baked hard on top - soft on  
bottom.

#7 Brick same size as #1 with  
E. Conc. 5% glass moistened  
with saturated solution of

Sodium sulphate - crust  
baked  $\frac{1}{2}$ " thick on outside & soft  
remainder soft.

#8 Brick same size as #1 -  
E. Conc. 5% glass moistened with  
Sat. Sol. American Oil & Supply  
Co's Soda Ash - baked a  
crust on outside - remainder very  
soft.

#9 Brick same - E. Conc. 5% glass  
moistened with Sat. Sol. Solvay  
Co's Anhydrous Carb. Soda.  
Baked with crust & very soft  
inside.

#10 Same except moistened  
with Sat. Sol. Sulphate Iron -  
Crust outside soft inside.

#11 Brick same - E. Conc. 5% glass  
 $\frac{1}{2}$ % clay moistened with Sat.  
Sol. Solvay Soda - crust outside  
soft inside.



Each of these had two samples in them and at front end one brick divided into 4 sections thus:-



Dividing space  $\frac{1}{2}$ " wide at top and  $\frac{1}{8}$ " at bottom. This baked best of any in kiln but was in hottest part.

Next run to be made with special attention to getting circulation of hot gases thro' bricks.

5/2/02 Kiln Run No. 25

furnace conditions same as last run - should be two sets of 12 bricks of the following description:-  
Each should be of Edison Concentrate with dust blown out of it - 5% of glass & 1/2% clay. Fired for 1 1/2 hrs at nearly white heat.

#1 Brick 5" sq at top. 7" sq at base - 6" high - divided into 4 parts by opening 3/4" wide at top & 1/4" at base & had two half round holes or arches thro' base running lengthwise of kiln - these holes were half of a 1" circle.



Baked fairly well but not very hard on bottom.

- #2 Brick same size as to 1 with hole  $1\frac{1}{4}$ " diam. thro' in direction of length of kiln. Baked soft on bottom.



- #3 Same as #2 but hole turned at  $45^\circ$  with axis of kiln. Baked very soft on bottom.

- #4 Same as nos 2 & 3 but hole turned at right angles with axis of kiln. Baked very soft on bottom.

- #5 Brick same size as to 1 but having a square fire brick  $3\frac{1}{2}$ " thick in its bottom and a hole down thro' its middle  $2\frac{1}{4}$ " in diam. Not hard on bottom.

- #6 Same as #5 but fire brick in bottom is rounded and  $1\frac{1}{4}$ " high. Not hard on bottom.

- #7 Same as to 5 but with a size C *Pottusia Crucible* inserted in its middle. Not hard on bottom.

- #8 Brick same size as #1 with hole thro' its middle  $2\frac{1}{2}$ " diam at top & 2" at bottom. Baked fairly well but not very hard on bottom.

- #9 Same as to 8 but hole 2" diam at top &  $1\frac{1}{2}$ " at base. Soft on bottom.

#10. Same as #1. but hole  
at bottom turned at  $45^\circ$   
with axis of pile  
fairly hard on bottom

#11. Same as #1. but space  
between parts of brick only  
1/2" at top + 3/8" at base, not  
hole in base. Set in  
middle of bottom.

#12. Same as #1 but hole  
in base turned at right angles  
with axis of pile.  
fairly hard on bottom

Each of these was duplicated  
and in front of the second  
set was a brick of Edison  
Cone, 5% clay divided into  
four parts.

Also one of same size but  
containing 5% glass + no clay

These clay + glass bricks  
secured of nearly equal hardness

In front of all and to protect  
them from the direct flame  
from the cone gun were placed  
two bricks of Edison Cone 5% glass  
+ 1/2% clay

Heat of this gun was too high  
as most of the bricks melted  
down somewhat.

Went run to test value of clay  
+ glass + clay + glass in bricks  
having openings thro' their  
base.

Brick of form of #1 showed  
up best results.

## Kiln Run to 3

General conditions same as previous runs.  
Bricks of following description were baked.

#1 Brick 6" sq at top 7" at base 6" high divided into 4 parts with space  $\frac{1}{2}$ " wide at top and  $\frac{3}{4}$ " wide at base. Holes three base 1" wide and 1" high rounded at top at 45° to axis of kiln Edison Conc. with 5% of a mixture of 95% clay + 5% slaked lime.  
Soft - Perhaps not hot enough

#2 Brick same form as #1 with holes running in direction of axis of kiln Edison Conc. with 5% of a mixture of 90% Red clay and 10% slaked lime.  
Soft perhaps not hot enough

#3 Same form of brick as #1 with holes running at right angles to blast. Edison Conc. with 5% of a mixture of 85% Red clay and 15% slaked lime.  
Soft on bottom - harder on top - perhaps not hot enough

#4 Brick same size and same partitions as #1 but holes three bottom 2" high instead of 1". Holes set at 45° angles to blast. Edison Conc. with 5% of a mixture of 80% Red clay and 20% slaked lime.  
Fairly hard -

#5 Brick same form as #4 but holes set at 90° with axis of kiln. Edison Conc. with 5% of a mixture of 75% clay and 25% lime good brick

#6 Brick same form as #4 but holes at parallel to axis of kiln. Edison Cone with 5% of a mixture of 70% clay and 30% lime. Fairly

#7 Brick same size as #1. but holes three bottom  $\frac{1}{2}$ " wide and 2" high. Edison Cone with 5% of a mixture of 60% clay and 40% lime. Holes at 45° angle of kiln. Soft on bottom fairly hard on top.

#8 Brick same as #7 but holes set parallel with axis of kiln. Edison Cone. alone. Fairly hard.

#9 Brick same as #7. but holes at right angles with axis of kiln. Edison Cone with 5% Red clay Dunderland. " " " " " " One half of brick Edison Cone & one half Dunderland Cone. Edison better than Dunderland. Within good.

#10 Brick 5" square at top 7" sq. at base 6" high - ~~bricks~~ drilled into four sections  $\frac{7}{16}$ " apart at base &  $\frac{1}{2}$ " ~~wide~~ at top. Holes three bottom  $\frac{1}{8}$ " wide & 4" high. Edison Cone with 5% of Potli's Clay on one side & Dunderland Cone with 5% Potli's Clay on other half of brick. Holes at 45° with axis of kiln. Within half very hard - ~~the~~ Dunderland half hard on top where it was packed hard and soft on bottom where it was evidently not packed tightly together.

#11. Brick same as form as #10.  
but holes at 90° with axis of kiln  
Edison Conc. 5% mixture of  
25% glass and 75% Red clay.  
not very good

#12. Brick same as #10 but  
holes parallel to axis of kiln  
Edison Conc. with 5% of a mixture  
of 50% glass & 50% Red clay  
Good - bottom soft - very hard  
on top.

#13. Brick of 16 sections each  
3 1/8" sq at base & 2 3/8" at top 6" high  
and 1/4" apart at base & 1/4" apart at top  
Edison Conc. with 5% glass and  
1/2% Red clay. Hole thru bottom  
each section 1/4" thick 1/2" wide & 2" high  
Good

#14. Brick 6 1/2" sq at top 7" sq at base  
6" high divided into 4 sections  
1/4" apart at base and 1/4" at top  
Holes thru bottom 1/4" wide at  
bottom 1/4" at top & 2" high.  
Holes running at 45° to axis of kiln  
Edison Conc. with 5% of a  
mixture of 75% clay and 25%  
glass  
Good

#15. Brick same size as #14 but  
holes set parallel with axis of kiln  
Edison Conc. with 4% glass and  
1% Red Clay  
Very good

#16. Same as #14 but holes at  
90° with axis of kiln  
Edison Conc. with 3% glass  
and 2% Red clay  
Very good

#17. Brick 6" sq. at top 7" sq. at base.  
6" high sections  $\frac{9}{16}$ " apart at  
bottom and  $\frac{1}{2}$ " at top. Holes  
this bottom same as #14.  
Holes running parallel to axis  
of kiln. One half of brick of  
Edison Cone with 3% glass & 1%  
Red Clay - other half of Dundee  
Cone - 0.3% glass 1% clay.  
Soft on bottom - good on top  
Edison better than Dundee.

#18. Brick 5" sq. at top 7" at base  
6" high partitions  $\frac{9}{16}$ " thick at base  
 $\frac{1}{2}$ " at top. Holes  $\frac{1}{2}$ " with 3" high  
Edison Cone. 4.2% clay 1% slaked  
lime. Holes at 45° with axis of kiln  
Soft on bottom - fair on top

#19. Same as #18 but holes parallel  
to axis of kiln. Edison Cone  
with 4% clay (red) and 1% slaked lime  
fair

#20. Same as #18 but holes at  
90° to axis of kiln. Edison  
Cone with 3% clay 1% slaked  
lime.  
Good - hard

#21. Brick same as #18 without  
partitions and with round  
hole down the middle 2" diam  
at top and 1" at bottom.  
Holes running parallel with  
axis of kiln. Edison Cone with  
5% glass  $\frac{1}{2}$ % clay (red).  
Very good brick - very little of  
soft portion in bottom.

#22. Brick same as #1 of last  
run. Holes parallel with axis  
of kiln. Edison Cone with 5%  
glass &  $\frac{1}{2}$ % red clay.

#23

Bricks, 6" square, 10-10  
 without partition holes  
 parallel with axis of kiln  
 Edison Conc. 5% glass  $1\frac{1}{2}\%$  red  
 clay

Put run by Dundeland on  
 in one section of each brick  
 with combinations of clay, lime  
 telepar, glass.

May. 12 - 02 Rilem Run #34

Furnace Conditions same as  
 previous run. Bricks  
 of Edison Conc. with one  
 section of Dundeland Conc.  
 Edison Conc. mixed with glass  
 5% and red clay  $1\frac{1}{2}\%$ .

Fired for  $1\frac{3}{4}$  hrs. then let stand  
 #15 min. before opening front of kiln  
 - Dundeland conc. with  
 5% of mixture of 90% red clay & 10%  
 slaked lime.

Brick 6" sq. at top - 7" sq. at base  
 divided into 4 sections  $\frac{7}{16}$ " apart  
 at base  $\frac{1}{2}$ " at top each with  
 hole thru base  $1\frac{1}{4}$ " wide at  
 bottom  $\frac{1}{4}$ " wide at top & 3" high  
 Bricks elevated on two fire  
 bricks.

Holes at right angles with axis  
 of kiln.  
 Dundeland conc. in rear  
 left section of brick

Very soft. Edison brick hard  
 and very hard on bottom.



#2 Brick same but holes parallel with axis.

Dundeland cone in rear left section of brick - with 5% of mixture of 95% red clay + 5% slaked lime.

Dundeland soft - Edison hard not very hard on bottom.

#3 Brick same as #2.

Dundeland Cone in front right section - with mixture of 80% red clay + 20% slaked lime.

Dundeland soft - Edison hard not very hard on bottom.

#4 Brick same as #1.

Dundeland Cone in front right section with mixture of 85% red clay + 15% slaked lime.

Dundeland soft - Edison hard not very hard on bottom.

#5 Brick same as #1

Dundeland cone in rear right section with mixture of 75% red clay + 25% slaked lime.

Dundeland soft - Edison not very hard on bottom.

#6 Brick same as #2

Dundeland Cone in rear right section with mixture of 70% red clay + 30% slaked lime.

Dundeland soft - Edison not very hard on bottom.

#7 Brick same as #2

Dundeland Cone in front left section - with mixture of 60% red clay + 40% slaked lime.

Dundeland soft - Edison hard, fairly hard on bottom.

#8 Brick same as #1  
Dunderland Cone in front  
left section - with 5% of  
mixture of 80% red clay + 20%  
slaked lime.

Dunderland soft.

Ellison hard + hard on  
bottom.

#9 Brick same as #1  
Dunderland Cone in rear  
left section with 5% of a  
mixture of 80% red clay + 20% slaked  
lime + also 2 1/2% of main  
Zelapax

Rather soft.

#10 Brick same as #2  
Dunderland Cone in rear  
left section with 2 1/2% Zelapax  
+ 5% of a mixture of 70%  
red clay + 30% slaked lime.  
Harder than #9

#11 Brick same as #2  
but hollowed out under-  
neath to make an arch



5" high

Brick 4" high  
Dunderland Cone in rear  
right section with 2 1/2% of  
main Zelapax and 5% of a  
mixture of 60% red clay + 40%  
slaked lime

Brick hard - hard on bottom  
Result no better than with solid  
brick under iron brick.

#12 Brick same as #1  
on brick like #11 - Dunderland  
Cone in rear right section - with  
2% main Zelapax + 5% of a  
mixture of 80% red clay + 20% lime  
Brick hard - fairly hard on  
bottom.

#13 Brick same as #1 - on fire brick  
like #1 also, Dunderland Cone  
in front left section with 2%  
main Zelapax + 5% of mixture  
of 70% red clay + 30% slaked lime  
Brick hard + soft on bottom

#14 Brick same as #2

Smudged cone in front left section with 5% of a mixture of 90% white clay + 5% Zephan

Brick not as hard as #13

Rather soft on bottom

#15 Brick same as #2

Smudged cone in front right section with 5% of mixture of 90% white clay + 10% Zephan

Brick fell down in furnace

#16 Brick same as #1

Smudged cone in front right section with 5% of mixture of 85% white clay + 15% Zephan

Brick not very hard

#17 Brick same as #1

Smudged cone in rear left section with 5% of mixture of 80% white clay + 20% Zephan

Brick not very hard - brittle

#18 Brick same as #2

Smudged cone in rear left section with 5% of mixture of 70% white clay + 30% Zephan

Brick rather brittle

#19 Brick same as #2

Smudged cone in rear right section with 5% of mixture of 60% white clay + 40% Zephan

Brick fairly hard

#20 Brick same as #1

Dundeland Cone in rear  
right section with 5% of  
mixture of 50% white clay +  
50% glass.

Brick hard - bottom fairly  
hard.

#21 Brick same as #1

Dundeland Cone in front  
right section with 5% of  
mixture of 80% white clay +  
20% glass.

Brick hard - fairly hard  
on bottom.

#22 Brick same as #2

Dundeland Cone in front  
left section with 5% of  
mixture of 60% white clay  
and 40% glass.

Brick hard - fairly hard on  
bottom.

#23 Brick same as #2

Dundeland Cone in front  
right section - with 5% of  
mixture of 40% white clay  
and 60% glass.

Brick hard - fairly hard on  
bottom.

#24 Brick same as #1

Dundeland Cone in front  
right section with 5% of  
mixture of 20% white clay +  
80% glass.

Brick hard - fairly hard on bottom.

~~Do~~ Bricks of Edison Cone in  
front.

Best results obtained with  
the Dundeland Cone were  
with mixtures of White Clay +  
glass = 80% clay to 20% glass per  
load of one worked well -

also mixtures of white clay and Telapar when more than 40 lbs of Telapar per ton was used.

Also mixtures of red clay - slaked lime & telapar.

The Edison Conc. baked fairly hard on the bottom in all cases.

May 14 - 02 Shien Run to 5

Furnace Conditions same as before - Each briggetta placed on two fire bricks.

Brigettas of same form as Brick No. 1 of last run but with four  $\frac{3}{8}$ " round holes thro' base -  $\frac{1}{2}$ " thro' base of each section.



All holes parallel with axis of kiln.

Each brick has one section of Dunderland Ore & three sections of Edison Ore - Edison ore mixed with 5% of glass &  $\frac{1}{2}$ % Red Clay.

First 5 bricks have three  $\frac{3}{16}$ " holes Nos. 6 to 10 have not the  $\frac{3}{16}$ " holes Nos. 11 to 24 had brick 6" ag at top - 7" at base, 6" high - partitions  $\frac{1}{4}$ " wide at base  $1\frac{1}{4}$ " at top - holes 1" wide at base  $1\frac{1}{2}$ " wide at top -  $3\frac{1}{4}$ " high.  $\frac{3}{8}$ " holes thro' base same as above brick

- #1 - 80 Red clay; 50 Zephan; 20 lime.  
fairly hard
- #2. 80 Zephan; 20 glass. 12 clay ✓  
hard
- #3. 80 Red clay; 50 Zephan  
hard
- #4. 60 Zephan; 12 Red clay  
hard
- #5. 80 Red Clay; 40 Zephan, 20 lime -  
hard.
- #6. 40 Red clay; 15 Zephan; 25 glass.  
hard.
- #7. 80 Red clay; 40 Zephan  
fairly hard
- #8. 40 Red Clay; 50 Zephan; 10 glass.  
fairly hard
- #9. 60 Red Clay; 40 Zephan  
not very hard
- #10. 90 Red Clay; 10 glass.  
not very hard
- #11. 50 Red clay; 50 Zephan
- #12. 85 Red clay; 15 glass.
- #13. 40 Red clay; 60 Zephan.

- #14. 80 Red Clay; 20 glass
- #15. 50 Red Clay; 40 Zephan
- #16. 90 White clay; 10 glass.
- #17. 40 Red Clay; 40 Zephan.
- #18. 85 White clay; 15 glass.
- #19. 50 White Clay; 50 Zephan
- #20. 80 White clay; 20 glass.
- #21. 40 White Clay; 60 Zephan.
- #22. 40 White Clay; 50 Zephan; 25 glass
- #23. 40 White Clay; 50 Zephan; 10 glass
- #24. 40 White Clay; 60 Zephan; 15 glass.

Plaster made at night and  
heat was too low. Buckles  
all soft on bottom. kept

run to be of same mixture as this one but try to fire brick floor instead of separating the fire bricks into pairs under each briquette as in last Run.

Also try taller brick

May 17-02 Kiln Run No 6 54

In this run the furnace conditions were still the same as in all previous runs.

The mixtures used were the same as in the last run. The first two bricks nos 1 & 2 were made 9" high instead of 6 but were otherwise of the same dimensions as nos 11 to 24 of last run.

The first 6 bricks nos 1 to 6 were set on an extra layer of fire brick closely set - not on separate aggrs of brick.

Nos 7 to 24 were each set on separate squares of brick 3" apart - about

Bricks nos 20 to 24 were made of the same mold as bricks nos 1 & 2 but cut off to 7 1/2" high.

They were fired for 1 3/4 hrs at a high heat - firing part of the front bricks

Bricks nos. 1 & 2 were very difficult to mould, on account of their light to trouble in moulding any of the others.

The larger bricks - nos 20 to 24 baked as well as the small ones.

The best mixtures were those containing 10 to 20 lbs. of glass with about equal parts of clay and felspar but those with about equal parts of clay & felspar were fairly good while those containing lime were quite soft.



May, 21, 02

Trials of single brick machine worked by hand to find what weight is necessary to compress standard and what distance it must fall.

Brick moulded, was  $7\frac{1}{2}$ " high with a base  $3\frac{3}{8}$ " square and top  $2\frac{3}{8}$ " sq. Each brick weighing about  $4\frac{1}{2}$  lbs.

Held this bottom of brick 3" high,  $1\frac{1}{4}$ " wide at bottom and  $\frac{1}{4}$ " wide at top.

Plunger 12757 1150 + 12757 2420.

Drop 10"

Sank 1<sup>st</sup> blow  $3\frac{1}{2}$ "  
2<sup>nd</sup> "  $\frac{1}{4}$ "  
3<sup>rd</sup> "  $\frac{1}{4}$ "

Strong enough to stand.

Pl same as above.

Drop 10"

1<sup>st</sup> + 2<sup>nd</sup>  $3\frac{7}{8}$ "  
3<sup>rd</sup>  $\frac{1}{4}$ "

Strong enough to stand.

Pl same as above.

Drop 8"

1<sup>st</sup> drop sank  $3\frac{5}{8}$ "  
2<sup>nd</sup> "  $\frac{3}{16}$ "

did not stand.

Pl same as above.

Drop 6"

1<sup>st</sup> drop sank  $3\frac{1}{2}$ "  
2<sup>nd</sup> "  $\frac{3}{16}$ "  
3<sup>rd</sup> "  $\frac{1}{16}$ "

did not stand.

Pl same as above.

Drop 3"

3 drops

did not stand.

Plunger same as last  
Drop  $8\frac{1}{2}$ " 4 drops  
stood but fell easily

Plunger 1275+1150+1275+2420+2550  
Drop  $8\frac{1}{2}$ "  
3 drops, strong enough to stand

Plunger same as in above  
Drop  $8\frac{1}{2}$ "  
1st drop sank  $3\frac{13}{16}$ "  
2nd " "  $\frac{3}{16}$ "  
3rd " "  $\frac{1}{4}$ "

strong enough to stand

Plunger - 7110+1160  
Drop  $10\frac{1}{2}$ "  
too weak to stand

Plunger 7470+1160  
Drop  $10\frac{1}{2}$ "  
3 drops  
strong enough to stand

Plunger 2420+7470+1160  
Drop  $10\frac{1}{2}$ " 2 drops  
pretty good

Plunger 11050  
Drop  $10\frac{1}{2}$ " 2 drops  
very good

June 12-02  
Kiln Run No 7.

Furnace conditions same as in former runs.  
Mould used ~~is~~  $7\frac{1}{2}$ " high  
7" ~~wide~~ at base with  $\frac{1}{4}$ "  
between sections -  $\frac{1}{2}$ " taper  
on each side - Core 3" high  
 $1\frac{1}{4}$ " wide at base

Each brick set up on fire  
brick ~~one~~ or on a brick 2" high.  
 $7\frac{1}{2}$ " sq. made of following  
mixtures of parts.

No.	Cement	Surclay	% quartz	% quartz
1	1			cracked
2	4	1		soft
3	2	1		fair
4	1	1		"
5	1	2		good
6	1	4		cracked
7	4		1	soft
8	2		1	"
9	1		1	"
10	4			1 " "
11	2			1 fair
12	1			1 "

The bricks of Dundeland are  
were mixed with the following  
weights in lbs. per ton of  
binders

10.	Red masonry lime	Blue clay	Telepar	white clay	
1	20	80			soft
2	10	60			"
3	60	40			"
4	80	20			"
5		40	60		"
6		50	50		"
7		60	40		"
8			60	40	very hard
9			50	50	soft
10			40	60	soft
11	20		80		soft
12	40		60		soft
13	60		40		very soft
14	80		20		" "
15	20			80	soft
16	40			60	soft
17	60			40	soft
18	80			20	soft
19	70	50			soft
20	50	50	50		fair

10	Red masonry lime	Blue clay	Telepar	white clay
21	30	50	50	soft
22	40	40	40	rather soft
23	20	40	40	fair
24	10	50	50	fill down

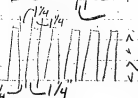
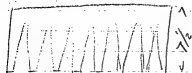
Fired kiln for  $1\frac{3}{4}$  hours - heat was  
too high as some bricks fused  
and ran too much.

Run not satisfactory as some  
benders that have given good  
results before failed to work  
this time.

Test run try combinations  
of blue and white clay with  
Telepar and some with a little  
glass. Try base bricks of  
combinations of cement & fire  
clay (1 to  $\frac{1}{2}$  to 1 to  $\frac{3}{2}$ ) and  
cement & fine quartz 1:1 to 1:4

July 9 1902  
Kiln Run No. 8

Fired two large bricks of  
Edison Ore



Both to see if they would stand  
up and if they would bake on  
their bottoms.

Both stood up - Edison Ore with  
clay - but neither baked on the  
bottom.

In front of these large brick  
will place brick of the form  
described on Page 62 - each  
set on a concrete brick whose  
composition is given in the  
Bricks Machine book P. 6  
One section of each brick was  
Dunderland Ore with the following  
binders - (lbs. per ton)

No.	Edison white clay	Edison black clay	Edison black clay	Edison black clay	Edison black clay	Edison black clay	Edison black clay
1	50	50					7
2	50		50				2
3	40	45			10		5
4	45		45		10		6
5	40		40	20			7
6	50		50	50			8
7	40		40	20	15		12
8	40		40	40	30		13
9	60		40				
10	50		40		10		
11	60	40					
12	50	40			10		

The conditions of kiln were same as previous runs. The fire was kept high until kiln was hot then lowest coal feed was until end of run - then  $\frac{1}{2}$  hr. then  $\frac{1}{4}$  hr. before opening kiln.

Large brick having flat top - set P. 65 - did not bake as well as other large brick and neither baked as well as the smaller bricks.

Brick No.

1. Not very hard soft on bottom
2. soft
3. full down
4. soft on bottom fairly hard
5. Not very hard - soft on bottom
6. not very hard " " "
7. fairly hard " " "
8. " " " " "
9. hard " " "
10. fairly " " " "
11. full down
12. fairly hard " " "

## Kiln Run to 9.

Conditions of kiln unchanged. Placed in hear and four bricks of Edison & Dunderland One - one section Dunderland - of size & form described on page 62 - set on concrete brick described on P. 6 of Bricker Machine book.

Below are given the lbs. per ton of binders used with the Dunderland Br.

No.	slip	white clay	black clay	black clay	black clay	glass	gypsum	Result
1	50	50					16	Soft
2	45	45				10	18	hard on top soft on bottom
3	50		50				20	soft
4	45		45			10	19	Brick left outside
7	60	40					21	Not very hard
8	60		40				22	full down because
9	50		35			15	23	cement bricks
10		60		60	20	20	24	pressed out from
11	40	40		40			31	under
12	40		40	20			32	them

Bricks nos. 5 & 6 were 24" long  
 2 3/8" wide at top - 3 3/8" wide at base  
 cord 3" high 1/4" wide at top 1 1/4" at base  
 nos 5 were 1 1/2" apart & nos 6 were  
 1 1/2" apart. Nos 5 baked  
 very much better than nos 6  
 nos 6 was very soft. Both  
 were made of Edison conc.

July 28 - 02

Analysis of Building Materials  
 used in previous Kila Kila Run  
 for Phosphorous.

White Clay -	Phos.	.031%
Blue clay		.091%
Felspar		.082%
Marble		.022%
Quartz		.021%
Calc.		.026%
Iron		.030%
Flint		.023%
Flinty Clay		.021%
Gravel		.034%
3 Mass Felspar		.107%
Crystalline Felspar		.002%
Massive Glassy Clay		.015%
Remaining Felspar		.012%
Aluminous Felspar		.030%
Pure Mass Felspar		.145%

871

Continuous Kiln

Cover blocks were made of the following proportions of materials

10.

Common sand

1.	1	2	5	Coarse clinker 2"
2.	"	"	"	"
3.	1	2	4 1/2	" "
4.	"	"	"	"
5.	"	"	"	"
6.	"	"	"	"
7.	1	2	4 1/2	clinker 1 1/2"
8.	"	"	"	"
9.	"	"	"	"
10.	"	"	"	"
11.	1	2	5	Fine brick 2" <small>melted on hot water surface</small>
12.	"	"	"	"
13.	"	"	"	"
14.	"	"	"	"
15.	1	2	6	Fine brick 2" <small>melted on hot water surface</small>
16.	"	"	"	"
17.	"	"	"	"
18.	"	"	"	"
19.	"	"	"	"

172

10. Common sand

20.	1	3	5	Fine Brick
21.	"	"	"	"
22.	"	"	"	"
23.	"	"	"	"
24.	"	"	"	"
25.	"	"	"	"
26.	"	"	"	"
27.	1	3	6	Fine Brick
28.	"	"	"	"
29.	"	"	"	"
30.	"	"	"	"
31.	"	"	"	"
32.	1	3	4	Fine Brick
33.	"	"	"	"
34.	"	"	"	"
35.	"	"	"	"
36.	1	3	4	clinker
37.	"	"	"	"
38.	"	"	"	"
39.	"	"	"	"
40.	1	3	5	Fine brick 1 1/2"
41.	"	"	"	"
42.	"	"	"	"
43.	"	"	"	"
44.	1	2	4	"



cement

sand

4.5	1	2	4 Crushed Fire Brick
4.5	1	2	" " " "
4.5	1	2	" " " "
4.5	1	2	4 brick 1 part Clay
4.5	1	2	4 " 1 " "
4.5	1	2	4 " 1 " "
4.5	1	2	4 " 1 " "
4.5	1	2	4 " 1 " "
4.5	1	2	4 " 1 " "
4.5	1	2	4 " 1 " "

Results -- Apr. 11, 16, 22, 28, 32, 13  
 17, 23, 27, 21, 15 were in hot  
 zone of boiler and all melted  
 on under side some enough  
 to expose bolts

Riley Run No 10

	yellow	blue	red	black	iron
10	40	40	10	73	iron
11	40	40	10	73	good
12	40	40	10	75	good
13	40	40	10	76	good
14	40	40	10	76	good
15	40	40	10	76	good
16	40	40	10	76	good
17	40	40	10	76	good
18	40	40	10	76	good
19	40	40	10	76	good
20	40	40	10	76	good
21	40	40	10	76	good
22	40	40	10	76	good
23	40	40	10	76	good
24	40	40	10	76	good
25	40	40	10	76	good
26	40	40	10	76	good
27	40	40	10	76	good
28	40	40	10	76	good
29	40	40	10	76	good
30	40	40	10	76	good
31	40	40	10	76	good
32	40	40	10	76	good
33	40	40	10	76	good
34	40	40	10	76	good
35	40	40	10	76	good
36	40	40	10	76	good
37	40	40	10	76	good
38	40	40	10	76	good
39	40	40	10	76	good
40	40	40	10	76	good
41	40	40	10	76	good
42	40	40	10	76	good
43	40	40	10	76	good
44	40	40	10	76	good
45	40	40	10	76	good
46	40	40	10	76	good
47	40	40	10	76	good
48	40	40	10	76	good
49	40	40	10	76	good
50	40	40	10	76	good
51	40	40	10	76	good
52	40	40	10	76	good
53	40	40	10	76	good
54	40	40	10	76	good
55	40	40	10	76	good
56	40	40	10	76	good
57	40	40	10	76	good
58	40	40	10	76	good
59	40	40	10	76	good
60	40	40	10	76	good
61	40	40	10	76	good
62	40	40	10	76	good
63	40	40	10	76	good
64	40	40	10	76	good
65	40	40	10	76	good
66	40	40	10	76	good
67	40	40	10	76	good
68	40	40	10	76	good
69	40	40	10	76	good
70	40	40	10	76	good
71	40	40	10	76	good
72	40	40	10	76	good
73	40	40	10	76	good
74	40	40	10	76	good
75	40	40	10	76	good
76	40	40	10	76	good
77	40	40	10	76	good
78	40	40	10	76	good
79	40	40	10	76	good
80	40	40	10	76	good
81	40	40	10	76	good
82	40	40	10	76	good
83	40	40	10	76	good
84	40	40	10	76	good
85	40	40	10	76	good
86	40	40	10	76	good
87	40	40	10	76	good
88	40	40	10	76	good
89	40	40	10	76	good
90	40	40	10	76	good
91	40	40	10	76	good
92	40	40	10	76	good
93	40	40	10	76	good
94	40	40	10	76	good
95	40	40	10	76	good
96	40	40	10	76	good
97	40	40	10	76	good
98	40	40	10	76	good
99	40	40	10	76	good
100	40	40	10	76	good

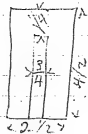
Large bricks - 24 long set on 2x2  
 edge of fire brick set 2" into cement  
 11. 1st 7 83 good  
 12. " 1 84 badly cracked  
 13. " 2 85 brittle  
 14. " 3 86 not very hard

Large brick did not get hard on  
 bottom - all Edison line - good  
 except 3" on bottom  
 Riley burned for 150 minutes  
 Large brick was set on standard  
 fire brick set on 1 part Atlas Portland  
 Cement 2 1/2 parts crushed fire brick

with fine dust screened out  
with 200 mesh screen - all  
under 4 mesh. This did  
not have enough fines to  
make a solid concrete - it  
was porous

# Kiln Run to 11'

Made base for large  
bricks of standard  
fire brick of following shape



Set in level in concrete made  
of 1 part Class Portland Cement  
to 1 1/2 parts sand  
Base of brick is concrete. Course with  
sand and clay for binders

77	Yellow	Black clay	White clay	Red	Blue
10		110			
1		110	40		33 soft
2	50				34 soft
3	50	110		13	35 "
4	50		60	13	36 soft
5	50	110		13	37 fairly hard
6	50		40	13	38 soft
7	50	110			39 soft
8	50		40		40 very soft
9	50	110			41 soft on bottom
10	50		50		42 felledown
11	50	110		10	43 hard
12	50		40	10	44 brittle
13	50	110		13	45 felledown
14	50		40	15	46 "

Large brick much better than  
large brick of Run #10. - had  
almost to bottom.

## Kilm Run #12

78

Base for large bricks 2 ft.

large brick ground 7 ft.

Set in 1 part cement  
4 parts crushed fire  
brick tacked up and  
1 part cement & 3 parts  
sand.

Three large bricks of Edison  
Cores. baked there to the bases  
very well - fired for one  
day 2 hours.

One two mixtures in which  
the fire brick were set, baked  
and crumbled.

Briguettes of three sections of  
Edison Ore mixed with glass &  
clay and one section of Dundee  
laid. Ore mixed with the Dundee  
given on following page - placed on  
bricks of cement mixtures with  
fine clay or white clay or blue clay or  
lime sifted dry over their tops to  
keep the briguettes from sticking  
to the cement bricks.

No.	Rein Steel	Size in inches	Color of Steel	Grade	Weight lb.	Quantity	Remarks on Properties
1	60	50		15	33	2 in (F)	
2	60		50	15	34	2 in (B)	
3	70	60			35	2 in (W)	
4	70		60		36	2 in (L)	
5	60	60			37	F	
6	60		60		38	B	
7	70	70			39	F	Scalld
8	70		70		40	W	Soft
9	80	65			41	L	Scalld
10	80				42	F	Soft on bottom
Large bignette of bottom						Course	good
11	50				47	B	Crumbled
12	50				49	W	Soft
13	60				50	L	Crumbled
14	60				51	F	fair
15	80				52	B	Scalld
16	80				53	W	fair
17	60				54	F	Scalld
18	60				55	L	good

Cement Bricks Nos. 33 to 42 incl. had been used in Run No. 11 and were in good condition at the beginning of this Run. Nos. 33, 34, 35, 37, 38, 40, 41, were in good condition at the end of this run after having been used twice. Bricks

Nos. 47, 49, 50 which were new at the beginning of Run #12 were in good condition at its close and will be used in Run #13. All other bricks were spoiled by the Run. The cast iron plate used under one bignette was melted down.

9-16-P2

Kilm River No. 13.

In this run the furnace conditions remained unchanged - the heights run of the form described in Run No. 7, Page 62. These sections being of Jackson Cove and ~~one~~ mixed with gires 58 and clay 42, and one section of Decatur. Oil mixed with clay and Zelepar as shown in the following table.

The feline were obtained from the Golding & Sons Co. of Freinton and the clay from Valentines of Woodbridge, N.Y.

The cement blocks under the  
brickets were covered as in the  
previous runs with either blue or  
white clay or fire clay or slaked lime  
to keep the bricks from adhering.  
The kiln was fired for ~~two~~ two hours  
and five minutes and opened 15  
min. after stopping the firing.

[illegible]

A Groendal process briquette  
received from Jas. Ballestrine  
was weighed dry, then soaked  
in water over night, the  
surplus water wiped off  
and the briquette again  
weighed.

weight dry 77.3 gms  
" wet 82.2 "

Water absorbed 4.9 "  
or 6.35% of the weight of the  
dry briquette.

## Cement Tops of Cars.

Cars to

1

10-1-02

Mixture

1 part Cement, 2 parts Fire Clay  
3 parts furnace clinker  
crushed to about  $\frac{3}{4}$ " mesh but  
not screened.

2

10-2-02

1 Cement, 2 fire Clay, 3 clinker  
under  $\frac{1}{4}$ " mesh.

3

10-3-03

See Buckner  
Machine Book

Oct. 24 - 02

Rotary Kiln Run for a method of firing that will heat the back end of kiln hottest.

Firing with 120-100 lbs of air and highest rate of coal feed got hottest point about 25- or 12 to 15 ft from the front of the kiln. Heated this portion of the kiln very hot in very short time.

Firing with as little air as possible - just enough to burn the coal without smoke - and highest rate of coal feed got kiln hot all the way to back end - no hot spot near middle - very even heat from fire pit front front of kiln to rear end and very little smoke.

Firing kiln with highest rate of coal feed and 112 lbs of air

Nov. 17 - 02

2<sup>nd</sup> Run of Tumbled Kiln

Fired with slow coal dust feed at 9:45 A.M. - heated to red by 5:00 P.M. - gradually increased heat until following morning.

Woolled cigarettes on cement bases and placed on case - used Edison Arc smijed with clay & glass in three sections of mouth & Dewdney No. 44444 - fourth section smijed with the weights per ton given on the following page of Smijers. The case was moved this kiln at intervals of 10 min.

Firing of the case to the side of the kiln stopped run before last cigarettes had reached middle of pipe.

No.	Weight	Time	Place	Result
87	120	1:00	1st	Good
1	60	40	1st	Good
2	60	40	1st	Good
3	60	40	1st	Good
4	60	40	1st	Good
5	60	40	1st	Good
6	50	30	1st	Good
7	60	20	1st	Good
8	50	30	1st	Good
9	50	30	1st	Good
10	60	20	1st	Good
11	50	30	1st	Good
12	50	20	1st	Good
13	50	40	1st	Good
14	60	20	1st	Good
15	60	40	1st	Good
16	60	40	1st	Good
17	50	30	1st	Good
18	50	30	1st	Good
19	50	30	1st	Good
20	50	30	1st	Good
21	50	30	1st	Good
22	50	30	1st	Good
23	50	30	1st	Good
24	50	30	1st	Good
25	50	30	1st	Good
26	50	30	1st	Good
27	50	30	1st	Good
28	50	30	1st	Good
29	50	30	1st	Good
30	50	30	1st	Good

Furnace trial of Feb. 19, 1903. <sup>88</sup>

Run of Tunnel like

Hot portion of furnace lined in sections of about five feet with one thickness fire brick leaving about  $\frac{1}{4}$  space between sections. These sections being laid after last run could not be bound <sup>to</sup> old wall securely and during heating up of kiln three fell in on top of the care.

One car of briquettes containing 16 groups of four was run into kiln about 10<sup>15</sup> hrs. when case became fast and could not be moved. Then coal was fed at top speed to get heat to start car. Fired hard for about 1/2 hour then shut down fire and cooled furnace. Briquettes were well baked thus and seemed very satisfactory. In the following list Nos. 1, 4, 7, 10, 13, 16, 18, 22, 25, 32, 35 & 38 were on this car. The other pyrolytic in the list were baked in the Rotary kiln fired for 2 hours & 15 min. They were not all worked to the bottom.

*Brygethus* nos. 1, 4, 10, 25, 32 & 35  
were sent to London by Messrs Rhoads &  
Poller. They were analyzed here with  
see P-93



No.	Stationary Kiln	Stationary Kiln	Stationary Kiln	Stationary Kiln	Stationary Kiln
1	60				
2	70				
3					
4	60				
5	70				
6					
7	60				
8	70				
9	60				
10	70				
11					
12	70				
13					
14					
15					
16					
17					
18	60				
19	70				
20					
21					
22					
23	55				
24	60				
25	55				
26	60				

No.	Stationary Kiln	Stationary Kiln	Stationary Kiln	Stationary Kiln	Stationary Kiln
1	40				
2	30				
3					
4	40				
5	30				
6					
7	40				
8	30				
9					
10	40				
11	30				
12					
13	40				
14	30				
15					
16	40				
17	30				
18					
19	40				
20	30				
21					
22	40				
23	30				
24					
25	40				
26	30				

Stationary Kiln  
SK. Fair

all right - near front of kiln

S.K. all right

SK. hard enough

but cracked

S.K. Soft on

Stationary Kiln - too

bottom, none too hard on top  
- fairly hard - probably acceptable

S.K. All right

S.K. Rather soft

all three.

SK. All right

S.K. Soft on bottom

S.K. Hard enough

and inside legs - hard enough on top.  
but somewhat cracked. near front of kiln.

SK. all right

SK. hard but

cracked & cracked  
cracked & cracked

SK. Sealed, cold &amp; full

SK. Sealed, cold &amp; full

& full  
& full apart.

SK. Fair, rather

soft on bottom &amp; bottom leg, hard enough on top.

10	sketch #16				
27	55	sketch #16		35	sketch #16
28	60			30	
29		60	sketch #16	40	sketch #16
30		60		40	
31		55	sketch #16	35	sketch #16
32	sketch #16	60		30	sketch #16
33	60		30		sketch #16
34	60			30	sketch #16
35	80		10	10	sketch #16
36	sketch #16	70	sketch #16	20	sketch #16
37	sketch #16	60		30	sketch #16
38	80			10	
39		70		20	sketch #16
40		60		30	sketch #16

SK. Soft on bottom and between legs, not very hard on top.

SK. Rather soft on bottom & between legs, hard on top.

SK. hard enough.

SK. all right.

SK. Cracked - hard enough.

SK. all right.

SK. Scaled and cracked.

SK. Not very hard.

SK. hard enough.

SK. all right.

but scaled off.

the following results: -

No. 1 -	.033 %
No. 10 -	.034
No. 4 -	.040
No. 25 -	.033
No. 32 -	.034
No. 35 -	.028

The concentrate from which these briquettes were made analyzed .027 %

It was afterward found that no dependence could be placed upon any of the above analyses.

Run of Tunnel Kiln May 1903

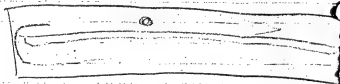
Kiln constructed in middle portion of red brick lined with 9" of fire brick with 1" air space between.

	Grinder	Pressure		
1	Wooten	300 atm	Hand outside	apt. bottom
2	"	350 "	"	"
3	100° dry 10- Spanish cut	4 drops	Hand shell	apt. inside
4	Chinese Wooten	300 atm	"	" bottom
5	20° lime ash	"	"	"
6	1/4" steel	"	"	"
7	100° dry 10- Spanish cut	300 "	"	"
8	10° clay	5 drops	"	" inside
9	80° dry 10- Spanish cut	300 atm	"	" bottom
10	20° "	"	"	"

For 3 & 8 were molded in drop  
plunger machine - all others under  
hydraulic pressure - bricks 3" diam 1 1/2" thick

9' 10.5  
60  
105  
420

12.5  
65  
30  
60



80 rpm. of 2" drum

20 rpm of mixer gives 60" per min  
1 rev. gives 3"  
Running 10 tons or 20 000 lbs per hr  
or 333.3 lbs per min mixer would  
have to run 111 rpm.

$$100^{\circ} = 1600 \text{ or}$$

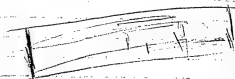
$$33 \overline{) 1600} \quad \begin{array}{r} 4848 \\ 30 \\ \hline 264 \quad 24240 \end{array}$$

60) 2424 rev. deliver 100 lbs,  
40 rev. per min

$$10 \text{ rpm}$$

$$0.5 \overline{) 2484}$$

$$\begin{array}{r} 49 \\ 2 \\ \hline 96 \end{array}$$



193

**Edison Portland Cement Company Records  
Plant Operations Notebook, N-03-00-00.2**

This undated notebook was used by Edison, possibly during 1903, for notes, calculations, and drawings. At the beginning of the book are notes regarding a humidor kiln, as well as drawings pertaining to the design of the cement plant. Several entries concern grinding, separation, washing, and conveyance. Toward the middle of the book are a few phonograph-related drawings. The pages are unnumbered. Approximately 25 pages have been used.

500 Cement

Old Kiln wt iron 272 lbs per inch length

" " Load 9 " "

" " Costing 66 " "

Total 547 " "

Weight in pounds per ft on length 4164 lbs -  
flanges not included

Kiln for Humidor - 5 dia -  $\frac{1}{4}$  156 lbs per foot  
Load 300 " "

5 flanges 4000 lbs each equals 200 " "

Total 656 " "

or  $6\frac{1}{2}$  times less wt per foot

Old Kiln weight operating 624 000 lbs

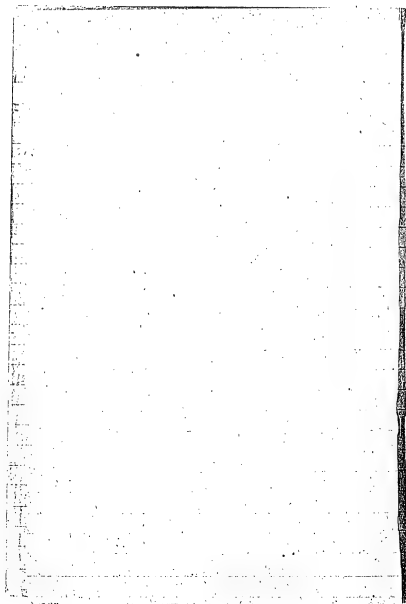
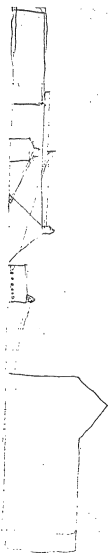
If there are 14 bearing pair wheels

for 44571 lbs on each pair of wheels - more  
on hot zone end

On Humidor kiln - 5 pair wheels 13120 lbs each pair  
with 8 inch face & close grain iron in flange  
& chilled face 24 inch wheels - thick  
twice 6000 -



Je 1



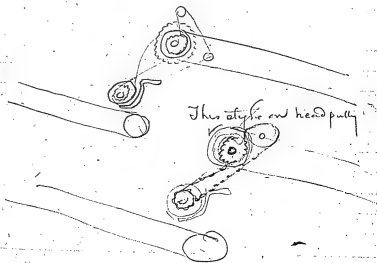
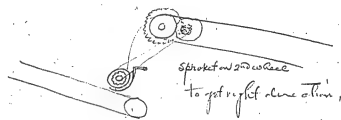
CHIMNEY  
1870

GABLE  
1870

Barn  
1870

1870  
1870

Wheel delivery on all belts except 200-mesh  
+ Coal —



Elev No 2 ~~Steel~~ links

Has 1 2 & 3rd 36 ~~4~~ Climber Conds  
rolls get Hexagon ~~man~~ links

How about Cost unloading  
Rth Coal -

Removal ~~ashes~~

Screw Conveyor Elev at  
Chack Eng ~~to~~ Rth -

How about more reliable  
~~feed~~ chack -

How about Extending Chalk  
Stack — to Double now ~~man~~  
Capacity =

Larger bearings deflection

Can we adapt Bunker's idea on this

If new wheel delivery works  
why not speed up  
109 & 110 - etc & also those in  
fine grader to 600 ft this  
will raise ore from 750 tons  
to 900 tons & no more will be  
on belt per foot,

All heavy belts should  
be driven both ends -

Can coal passers be dispensed  
with by feeding coal from  
pile to belt -

~~Wind furnace~~  
~~Chills - of every kind -~~  
Charcoal Supplies

More Coal drying Capacity

Can Wheel delivery  
to put in box Racks

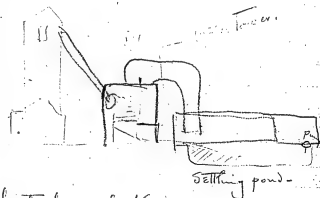
~~Examine Clinker Stock~~

Red Clinker Trough for 789410 Rds

~~Special Oyle oil in winter~~  
~~for Cars that don't freeze~~  
~~Oil~~

Can repair Cars & 2 damaged  
underland Buses people have  
6 other & changed one

~~Get~~ Get full log on Car  
 repairs - Costs Etc & see  
 where trouble is & how it  
 can be remedied -



Velocity diminishes  $\frac{1}{2}$   
 after delivered on ground

If air laden with dust is delivered  
 at the ground it will spread  
 $\frac{1}{10}$ th as much

How about 4 ft Edison  
Roll at Raub.

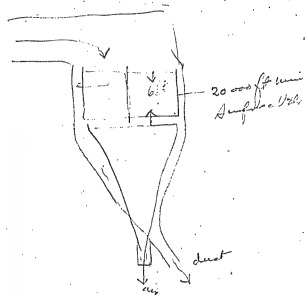
~~Don~~ May have got an other  
men-dial - + got husky  
plates to finish foot  
dys - Then we could have  
done unloading of  
D.L. 1017 ~~unloading~~ <sup>unloading</sup>  
Cans - footers smaller they  
will probably permit &  
also we could sell to  
other Cement Co. like  
dys -

How about using  
~~DRD~~ Nailer from <sup>Edison</sup>  
~~Edison~~ Raub.

ing








Blow coal return coarse to  
 a bag tube mill to remove  
 double screw under  
 with blow bin  
 same air -

On dusts - speeding up the layers  
of ore would prevent dragging -

Diminution 125 Cope for Coarse  
at Duster -

Screw or Dust in Receptacle 1 

Dust could make 1 tier for  
Coarse distribute along  
Whole of Duster -

Hand down Coal stock -

Exhauster 5000 ft guage  
in 13 with blower power -

General shudders blown  
Houses -

See Cost Carpenter work  
- mill -

Scheme working 4 Runway  
Clean face with water  
then Blast then Load  
2700 tons of transport  
Should now etc  
fig out costs this way  
show utilize the man

grind Coal fines

By running only 2 days 12 hours  
8000 666 output. Sh 2 8 mills -

Small use Carb

Idlers on heavy loaded belts  
wear very much quicker -  
Spiders have broken -  
Why do they break.

Cost bug in Mixing plant is getting  
stuck to floor. When shut off  
12 men average.

Magness says 4 men <sup>on shift</sup> can E.C.  
road in Blower Hu 101  
by putting shaddlers  
on conveyor under 10 g -

On Clunker Car. Says 3 men  
on shift with shaddlers &  
O'Brien.

Motor stops big item.

180 181 Rotten drive

Washery for June 14 —

1.3 Mills saving per bbl  
per lb of Coal saved  
in Rite —

Chalk for Kilns should be  
get even

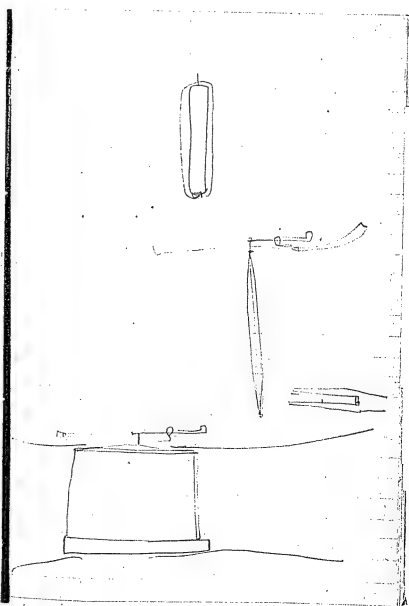
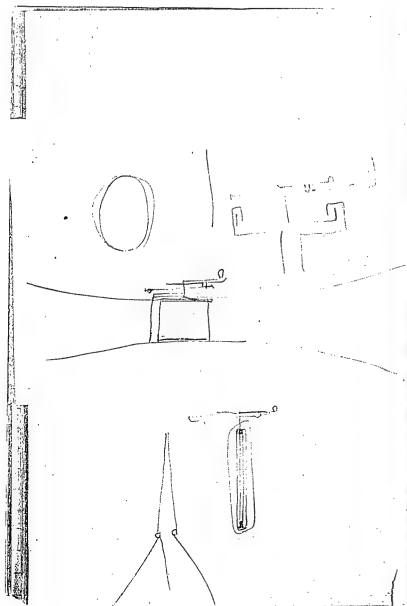
# Savings

Crusher plant 1 shift 5000 bbls	008
Saw cleaner Chalk & Chalk spindles	011
Steel shafts with labor	020
Pyroann - Humber & Hughes Lumber	010
10% Reduction wages -	018
Drum rollers increase from 540 to 600 bbls	
4-bottle friction unlard line seal etc	036
Belt conveyor saving	020
Quarry lime drawing out	100
General Repair at all points	020
	242

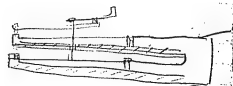
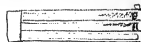
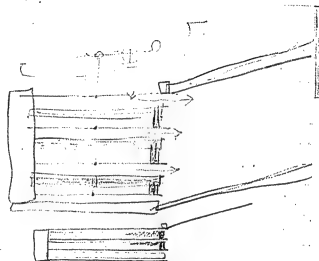
## Possible -

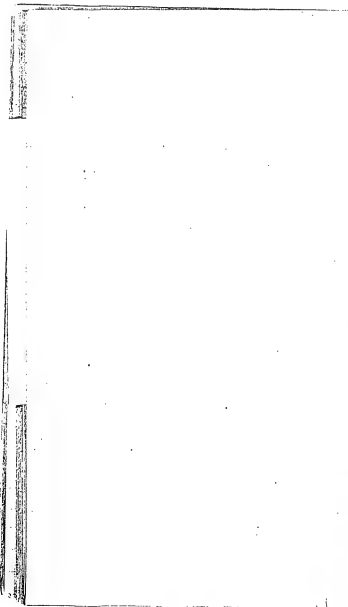
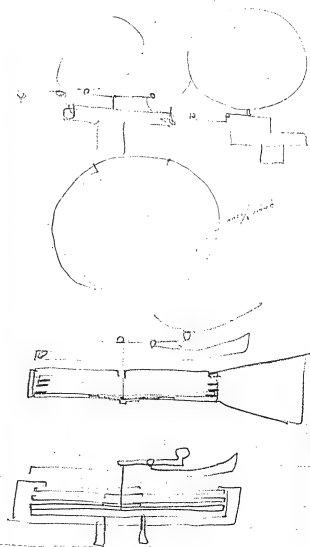
Saving in better confounding	0008
4 testing for friction -	
Use Tires in better 30000 Vs 26400	0006

Reservoir Coasting ~









1<sup>st</sup> May be moisture in the green, causing flow.

2<sup>nd</sup> Pressure may have been at times less than

$3\frac{1}{2}$  lbs on account of hindering

3 = The flake has caused from bottle, slightly thicker & full hydrogen & little bubbles with which good tubes were made to Joseph smooth of tubes from which no good tubes were made: and flake probably had more force in -

if End plunger hardened or buffed since good tubes were made -

1<sup>st</sup> It is not the KOH, as KOH of various kinds - have been used & the good tubes have withstood it. Not KOH.

2<sup>nd</sup> It is not the Green as 708 Big lot has been used right along - it may be varying moisture

Not the Green -

3<sup>rd</sup> Not the pressure as that has been uniformly  $3\frac{1}{2}$  lbs - but may be pressure not out line caused it.

Not the pressure -

4<sup>th</sup> Total Number Sections been the same - 10 of 24 -

Not the number of sections

5<sup>th</sup> Size plunger not changed with various good tubes - except hardened & buffed more

6<sup>th</sup> Not  $1\frac{1}{2}$  spiral turned around as good tubes made with them at least 20 ft 500 series -

Not  $1\frac{1}{2}$  spiral -

5= Rings have been fitted tighter  
6 Not the beams as they are the same  
Subs is however 0.03 more inside diameter

7 The quality of the metal plating on tubes  
may have changed -

8 The angle of the dump beam changed  
when it connects to tube,

9 Jamrod being out  $\frac{1}{16}$  inch end of plunger  
not horizontal this caused them to move  
to one side or the other,

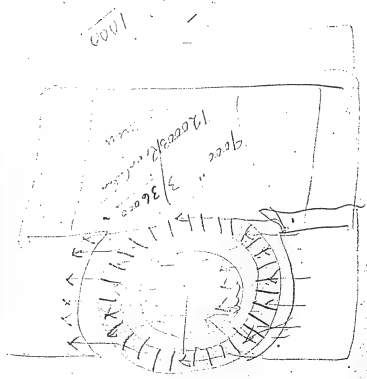
10= Good tubes made by clamping green on  
of tube & then letting both drop -  
This should be tried -

11 Why do the Brown tubes run over 1100 feet  
run out and after 2000 feet run -

7 Rings have been fitted tighter

8 The rate of changing has not been  
changed on the board but rate slowly  
been changed slightly - but it has not  
affected good tubes -

Not the change of discharge



$$\begin{array}{r}
 242 \overline{) 3000} \quad 124 \\
 \underline{480} \\
 240 \\
 \underline{480} \\
 240 \\
 \underline{480} \\
 240 \\
 \underline{480} \\
 0
 \end{array}$$

$$\begin{array}{r}
 16 \overline{) 3000} \quad 200 \\
 \underline{320} \\
 2700 \\
 \underline{2720} \\
 20
 \end{array}$$

$$\begin{array}{r}
 214 \overline{) 3000} \quad 14 \\
 \underline{256} \\
 440 \\
 \underline{428} \\
 120
 \end{array}$$

$$\begin{array}{r} 32.0 \\ 2 \\ \hline 64.0 \end{array}$$
 27  
 88-0



$\frac{1}{2}$  hour  
 100-100 100 100  
 200 200 200  
 100-100 100 100  
 200 200 200  
 100-100 100 100  
 200 200 200

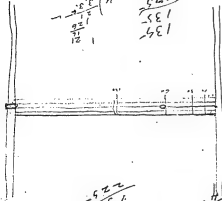




$$\begin{array}{r} 492.75 \\ 62.500 \\ \hline 555.25 \\ 132.25 \\ \hline 687.50 \end{array}$$

$$\begin{array}{r} 2.50 \\ 1.35 \\ \hline 3.85 \\ 115 \\ \hline 128.85 \end{array}$$

18225



$$\begin{array}{r} 62.500 \\ 31.250 \\ \hline 93.750 \\ 40.500 \\ \hline 134.250 \\ 15.000 \\ \hline 149.250 \\ 22.500 \\ \hline 171.750 \end{array}$$

$$\begin{array}{r} 62.500 \\ 31.250 \\ \hline 93.750 \\ 49.250 \\ \hline 143.000 \end{array}$$

$$\begin{array}{r} 62.500 \\ 31.250 \\ \hline 93.750 \\ 182.250 \\ \hline 276.000 \end{array}$$

$$\begin{array}{r} 21135 \\ 67 \\ \hline 21202 \end{array}$$

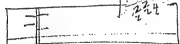
$$\begin{array}{r} 125 \\ 250 \\ \hline 375 \end{array}$$

$$\begin{array}{r} 62.500 \\ 31.250 \\ \hline 93.750 \\ 49.250 \\ \hline 143.000 \\ 19.250 \\ \hline 162.250 \\ 49.250 \\ \hline 211.500 \end{array}$$

$$\begin{array}{r} 250 \\ 162.500 \\ \hline 417.500 \\ 10.000 \\ \hline 427.500 \end{array}$$

97c

32 | 318 | 997  
288  
224



3 | 1895 | 625  
1250  
- 1250 = 057

587c  
90 | 1000 | 15

425 ours  
240-Ramb  
636



1 cm - 1 ft 6 in  
1 m - 1 ft 6 in

10 cm - 1 ft 6 in

636 | 34100 | 536  
3180  
7380  
342

40  
54  
94  
31  
189-Ramb  
82  
87-103  
65  
4

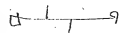
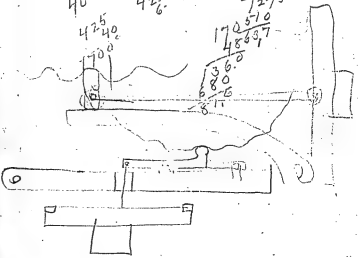
90  
210  
784

341

425  
235  
235  
1275

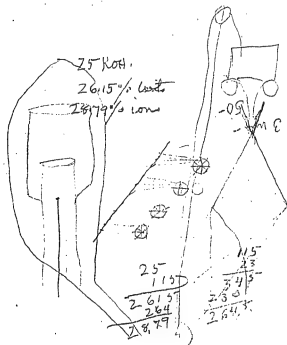
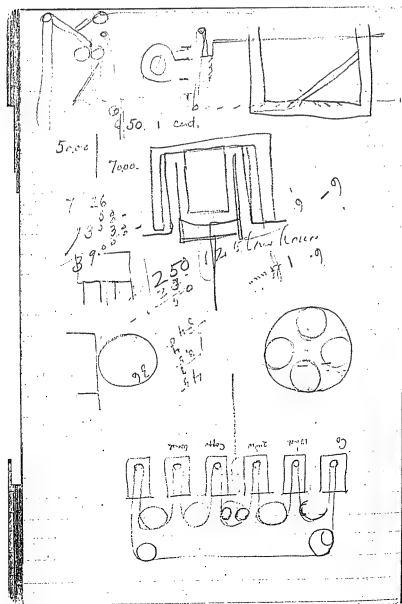
40-  
425  
425  
1700

170510  
48897  
3600  
6800  
811









$$4 \begin{array}{r} 21 \\ 230 \\ \hline 23.7 \end{array}$$

$$\begin{array}{r} 230 \\ 23 \\ \hline 68 \\ 468 \\ \hline 529 \end{array}$$

23.30 lot

$$\begin{array}{r} 2100 \\ 529 \\ \hline 26.29 \end{array}$$



**Edison Portland Cement Company Records  
Plant Operations Notebook, N-04-11-01**

This notebook contains an undated entry by Edison on the first page. The remainder of the book was used in 1904 by draftsman E. J. Glasebeit, for drawings and calculations relating to construction plans. The front cover is marked "Simpkins."

Only the entry by Edison has been selected.

1 = Proven made on 36" Belt  
Conveyors - where 50 HP is put  
piston same size as 15" + cuts  
all to pieces.

2 = Flexible - speak about Blowers

3 = Not only are pistons on all our  
heavy conveyors etc wearing  
badly but they are breaking  
showing that there never was any  
factor of safety.



**Edison Portland Cement Company Records  
Plant Operations Notebook, N-99-07-01.1**

This notebook was used by Edison for notes and calculations relating to operations at the Stewartsville works during the period July 1905-February 1906. The calculations detail plant capacity and losses in time at different stages of production. Included is information regarding the crusher and packing plants, the kilns, and the quarry. Other entries pertain to supplies, repairs, and the consumption of coal and oil. The front cover is marked "Cement." The pages are unnumbered. Approximately 60 pages have been used.

N-(99-07-01.1)

Loss of capacity at Crushing plant  
due to following —  
from July To Feb 196 Days —

Waiting for rock	123.0 min Daily
Grants	11.8 "
1" 36 Rolls	7.5
2 36 Rolls	5.4
3 36 Rolls	12.6
Hoppers	15.4
Car Hoist to Kup Dump	8.7
Engine No 1	2.6
Tracks Car trouble foot melms	3.5
Dryer No 1	13.3
Conveyor 99	1.5
" 101	5.7
" 102	6.6
" 104	17.5
Charging Tripper	9.4
	244.5 min daily

5.8 due to  
crushing down  
11.6 due to big  
Rocks

1.3 lost by  
old hoist  
motor

Exactly half of this whole loss of  
time is due to waiting for Rock.

The Quarry record shows that the average  
daily waiting for Cars was 241 minutes  
daily —

Crusher

194 200 p -

104 36 Roll

Showered	301
Belt slipped	345
Belt slipped	83
Ream checked	18
Ream - fly wheel	16
Chamfer to	100
Chamfer	47
Repaired to	18
Repaired to	14
Chamfer checked	10
	<u>145</u>

7.4 mm daily

2nd 36 Roll

Showered	281
Ream belt slipped	70
Chamfer checked	17
Roller checked	40
Waste coming apart	67
Repaired waste	66
Chamfer then pin	20
Waste slipping rollers	363
Chamfer, shower	<u>34</u>
	1054

5.4

104 Con 196 Days

Water sloped	1174	✓
Belt slipped	269	✓
Motor burned out	265	✓
" Short ckt	37	✓
Belt gun (D. paint)	523	✓
Repair Motor	43	✓
Changing fuse hot	5	✓
Dropped chain broke	35	✓
Taking up belt	308	✓
Loose belt	10	✓
Fuse blew	297	✓
Repair belt	159	✓
Put band on chute	5	✓
Take bands off delivery	5	✓
Repair dripper	290	✓
Mont dirt tent	7	✓
	<u>3434</u>	

# Hoppers—

Rock stuck in Giant Hopper—	2284	11.6 <sup>2mg</sup> minute
Hopper under Giant Choked	309	1.5
Empty overflow Hopper	115	0.6
Cleaning Hopper	68	0.3
Rock stuck in feed Roll—	59	0.3

One these steps duplicated in Giant records

Evidently it don't pay to send up extra large rocks when evz are pushed—

210 Days -

Loss time C-111 -

Repair belt, O	7	minutes daily
Choking "	4	
Belt slipped "	3	
Stack, overload	2.2	
Taking up belt, O	1.2	
Motor -	5.0	
Shaft-Pinion breaker,	2.0	
Motor belt-jump (new belt slipped on the belt)	1.5	
Hopper blocked	0.9	
Feeder blow,	1.1	
Key shaft Drive bearing -	1.0	
Quadrant - 5	1.5	
Reaming 2nd S	0.4	
Log on 8" 1101	0.7	
Repair shaft 1	0.3	
" Conflow-chute	0.3	
New belt, O	0.5	
Repair Jarvis Rubbers	0.4	
Miscellaneous	0.3	
	<u>33.3</u>	

Loss time in Chalk Plant daily  
average from July to Feb'y 1966 daily

Engine #102	12.3	min daily
Feed roll Byron	0.4	
Blower House	0.6	
Con 109	33.7	
" 110	9.3	
" 111	33.3	
112	5.4	
113+114	5.9	
	<u>101.4</u>	

This is average loss daily outside  
of Crushing Rolls -

Crushing Rolls loss capacity daily  
 $\frac{101.4}{147.9}$  minutes  
 Total -  $\frac{249.3}{4}$  "   
 or 4 Hours + 9 minutes

Substituting Cables sheaves etc. of 2991.32  
 leaves 3439.53 - leaves daily expenses  
 outside belts \$16.38  
 Repair labor daily 14.47.

Supply Chalk Plant. July To Jan'y inclusive -  
 210 days -

		Daily	Miles per day
Cables.	\$ 2934.10	\$ 14 00	
Roll plates	1720 54	8 25	3.1
Miscellaneous	554 57	2 64	1.0
Babbitt	600 00	3 00	1.12
Bearings	118 11	.56	
Bushings	123 15	.58	
Motor straps	47 66	.22	
Wood Sheaves	40 56	.24	
Transmission rope	78 62	.37	
Sheave bushings	26 00	.13	
Gudgeons & bearings	21 34	.12	
Pinion shaft	33 49	.15	
Spacing Rolls	31 32	.14	
Sprockets	19 10	.12	
Slop Rubber belting	10 33		
Plate bolts	13 59		
Sheaves	7 67		
Check Plate	10 40		
Wear "	14 79		
Wood shear pins	13 00		
Roller chain	4 68		
Wires	2 89		
Con Brushes.	1 26		
Pinion bushing oil chain	2 68		
		Total 6430 85	
		\$ 30.62 daily	

Loss in Clinker Crusher Plant  
Average of 176 days.

1st 36 Rolls.	19.0	min daily
2nd 36 Rolls	45.5	
Con 125	31.6	
Con 126	75.9	
Jros Elev	1.0	
Scraper-	10.4	
	<hr/> 783.9	daily -

Daily loss time in Cement grinding  
Plant from July for 196 days

Engine H <sub>2</sub> O <sub>3</sub>	11.3 mins Daily
Coil 130	19.8
" 131	10.6
" 132	21.4
" 137	45.8
138	6.6
139	6.7
140	2.4
143	1.4
144	5.2
	<hr/> 131.2 mins Daily

26.8 ducts  
drive mechanism  
time?

Outside of time lost on Rolls -

Loss on Rolls  $\begin{array}{r} 231.2 \\ 131.2 \\ \hline 362.4 \end{array}$  total daily loss

of Capacity

If <sup>in 137</sup> drive mechanism is fixed properly loss will  
be reduced to 104.4 minutes



# Supplies for Cement gr under plant 210 days

Cables	4633.47	Daily
Roll plates	3651.60	18, 24, 7.6 hole
Roll shafts	1368.62	5, 73
Miscellaneous	1256.06	5, 48
Babbit	1305.43	not used
Spacing Rods	1757.43	8, 36
Bushings	422.98	
Bearings	294.46	
Structural steel & Castings etc.	219.00	
Drive Belt	183.60	
Roll Shafts	228.24	
Plate bolts	179.33	Rotten
Wood & Rope Shafts	203.60	Rotten
Shaft bushings	155.27	
S Dump Pulley	79.94	
24" x ply belt	123.31	white line
Tightening screws	37.50	
Rope Wrenches	13.80	
Idlers	10.12	
Gears	20.00	
Pump shaft	27.08	
Gudgeons	9.12	
Gypsum screws	19.00	
Transmission Rops	87.48	
Water pumps	40.29	
Wood shaft pins	23.79	
Coupling bolts	51.88	Rotten
Check plates	28.45	
Rubber Diaphragms	10.50	
Wires	5.18	
Spacers for sampler	5.00	
Bushings for Drive Pulley	53.18	
Wash plates	1.74	
Paul Springs	1.60	
Shafts for turn up roller	2.62	

#16572-67  
78.63 per day

Subtracting 6811.91 - due to dispensing  
with Ripper on rolls leaves, 9700.76.

Total -

Leaves daily Expenses \$46.19 -  
outside Conveyor Belts

Repair Labor Daily 45.56.

$\frac{7863}{124.19}$  Daily -

But change to spring rolls should  
reduce it - to 91.75 -

+ probably less for labor will be very  
much lessened -

offset will be extra cost of Coal for  
power -

## Quarry

Loss average daily 196 days -

Waiting for Cars	241 minutes daily
Cleaning loading Truck	69 "
Moving Shovel	77
Shovel Repairs	32.9
Laying Loading Track	33.
Waiting for Steam	5.
" for Blasting	13.
" for locomotives	5.9
	<u>475.8.</u>

This apparently leaves only 125 minutes daily to load. Apparently if Quarry works 10 hours a day only one shovel at a time the record must be wrong.

Loss on RR Railroad

from all causes 1.8 minutes daily -

Changing to spring Rolls saves  
56.4 minutes Reducing loss to  
91 minutes —

No 1 & 2 Chalk Rolls -  
Loss daily -

190 days.

Putting on & off plates 52 minutes daily - because roll was  
running this cut down capacity plants to 26.0 min daily

Collars 7436 -	38 min total $\frac{1}{2}$ "	19.00	"
Starting 873	4.5	2.25	"
Shavings 3295	17.	8.50	"
Bushings 4009	21	11.5	"
Draw Pully 1127	6	3.0	"
No one 5986 -	31	34.5	"
Screen Ciler 445	2.4	1.2	"
Girders 3077	16.	8.0	"
Coupling Pul 1012	5.3	5.3	"
Cables 3116	16.3	8.2	"
Shear 511	2.6	1.3	"
Choked 1900	10.	5.0	"
Belt 1600	8.4	8.4	"
Shcaas 1505	7.8	3.9	"
Bearings 6871	36.	18.0	"
Wear 2993	15.2	7.6	"
Hopper 482	2.5	1.2	"

143.8  
143.7  
143.7

The records in chalk plant are badly kept, for a long time no loss of time was given for putting on plates, hereafter, want every minute accounted for in the 24 hours + for each day in the month,

But Jan'y 11 + 17<sup>th</sup> on Roll no 2 there is a lot of time no accounted for, this tends to make records worthless,

Clunker Grinders rolls -  
Comparison of total losses

Coupling & Wire	722	101
	868	2
	923	3

Cables	1473
	1939
	2446

Shredded	427
	606
	674

Hopper	527
	745
	605

Plates	5,686
	11,875 → why?
	5,397

Best -	1105 → why
	521
	58

Shoes

517  
4534 — wing  
1387

Spacing Ribs

7692  
3763  
6898

Balls

192  
664  
000

Loose Plates,

120  
90  
841

Thrust Collars

1735  
490  
2205

Piston

25  
100  
000



Roll- 607  
000  
000

Bearings 2031  
3067  
1065

Retaining Plate. 206  
000  
000

Collar 26  
1640 — why  
000

Housing. 112  
74  
172

Bushings -

22496 - why  
11341  
1110

Springs -

260  
000  
977

Guides -

4319  
3030  
5818

Pkg Bearings -

120  
000  
93

Starting

249  
51  
00

New Bush Jack shaft.

1275  
000  
23  
000

Choked

000  
23  
000

Shafts.

000  
7486  
13286

Welding Housings

000  
000  
153.

This is a total loss in 220 days from July 1st  
to July 16 - of 672 minutes daily

or for whole Mill - 224 minutes daily

# Underquanders

			Mill Time total Loss mins daily
Coupling	11.4	$\frac{1}{3}$ is.	3.8
Gibs	26.6		8.8
Shearers	7.7		2.5
Nipper	9.0		3.0
Plates	104.3		34.7
Belt	7.6		<del>7.6</del>
Sheaves	29.2		9.7
Spacing Roll	83.4		27.8
Rolls	3.9		1.3
Loose plates	4.8		1.6
Thrust Collar	17.3		5.7
Decaning	28.0		9.3
Collar	7.6		2.5
Bushings	159.0		53.0
Aprenings	6.0		2.0
Grades	59.8		19.9
Shafts	94.0		31.0
New Bush Jack	6		2.0
Various	7.6		2.5

223  
6  
231-6

Add Coupling & uncoup

It is probable the loss of time of coupling & uncoupling should not be divided by 3 in the total.

There are probably other items that should be corrected same as coupling etc.

15

There was 343 items against the 3 Rollis -  
 its probable that for each item the mill had to be  
 shut down & started up - I allow 10 minutes  
 for this which makes a total of 3430 minutes  
 which in 220 days is 15 minutes,  $\frac{1}{3}$  of which  
 is 5 minutes -

As that loss daily plant	131.2
Rollis -	<u>236.2</u>
	367.4 minutes,

Or 6 hours & 7 minutes -  
 out of 60th shifts,

Substitution of Spring Rollis -	
Save,	8.8
Cable.	
Shower	9.7
Spacing Rollis -	27.8
Grinder	19.8
Coupling & anc -	<u>5.3</u>
	71.4 minutes,

Reducing loss to	<u>296 minutes</u>
or 4 hours 56 minutes,	

It is probable belt time must not  
be divided by 3 but the mill is down  
the whole time for any Roll belt.  
This will increase daily loss from  
Roll drive belts to 7.61 - This  
adds 5 minutes.

This makes Corrected total of

Plant	131.2
Rolls	241.2
	<hr/>
	372.4

6 Hours 42 minutes,

Kilns - total loss. 1<sup>st</sup> fire Kiln 1 2<sup>nd</sup> Kiln 2  
400. on

Short Coal

6380  
1548  
12625  
4930  

---

25483

Nosebrick

4535  
3630  
720  
4885  

---

13770

Coal screw choked

60  
00  
00  

---

60

Heating up

435  
195  
195  
1300  

---

2125

Chalk Screw-

$$\begin{array}{r} 2045- \\ 2005- \\ 125- \\ 190- \\ \hline 4365- \end{array}$$

Boats

$$\begin{array}{r} 190 \\ 80 \\ 35- \\ 195- \\ \hline 500 \end{array}$$

Idler Shafts

$$\begin{array}{r} 1285- \\ 430 \\ 660 \\ 120 \\ \hline 2295- \end{array}$$

Motor Draps

$$\begin{array}{r} 125- \\ 000 \\ 140 \\ 000 \\ \hline 265- \end{array}$$



Patching

$$\begin{array}{r} 3120 \\ 1050 \\ 1345 \\ \hline 4345 \\ 9860 \end{array}$$

Chick Supply out of Cow-

$$\begin{array}{r} 17520 \\ 25870 \\ 23452 \\ \hline 24622 \\ 91464 \end{array}$$

Shell Cracked

$$\begin{array}{r} 14205 \\ 0000 \\ 0000 \\ 0000 \\ \hline 14205 \end{array}$$

Stack

$$\begin{array}{r} 525 \\ 1145 \\ 590 \\ 2230 \\ \hline 14490 \end{array}$$

Bad Chunks Con

$$\begin{array}{r} 260 \\ 2035 \\ 000 \\ 75- \\ \hline 2370 \end{array}$$

Apron

$$\begin{array}{r} 2250 \\ 720 \\ 000 \\ 2995 \times \\ \hline 3965 \end{array}$$

Motor

$$\begin{array}{r} 2880 \\ 115 \\ 000 \\ 155 \\ \hline 3150 \end{array}$$

Relining

$$\begin{array}{r} 1440 \\ 2160 \\ 420 \\ 12435 \\ \hline 16455 \end{array}$$

Armature of Cooler

620  
000  
000  
000  

---

620

Motor Chalk feed

40  
00  
00  
00  

---

40

Motor Coal feed

70  
00  
00  
00  

---

70

Tires-

0000  
1440  
0000  
0000  

---

1440

Dining Cooler

0000  
3080  
0000  
0000  

---

3080

Coal Ring

0000
3440
0000
0000
<hr/>
3440-

Total loss 225412 minutes  
in 225 Days - or 1000 minutes  
or 16 hours daily -

Dividing this in the 4 Kilns  
gives average daily loss each  
Kiln of 4 hours -

The method of keeping the record is  
such that nothing can be got out  
of it - Hereafter each Kiln must  
account for 24 hours every month  
whether it is running or not - the  
reason otherwise record is no  
good & useless -

# Conv 137-

Belt slipping -	12 items	358 min lost
Belt & pulleys in Sump	2 "	555
" pulled apart at pulley	3 "	92
" Ripped	1 "	305
" Repairing	5 "	374
" Taking up	5 "	487
" Fuse blew most ducts overboard	27 "	715
" Tracking belts	2 "	17
Hopper blockers	3 "	61
Ducts to B plumb	1	19
Overload disconnect	1	20
Put on special roller	1	47
Changing Motor	2	1270
Chg. flex shaft drive	3	232
Shaft bent	1	50
Broken teeth	4	492
Repair flex drive	1	240
New gear shaft drive	2	860
Shaft broken	1	1930
Putting Chain on	1	55
Fuse broke	1	123
Chain Choked	1	12

5261 min lost  
Conveyor  
drive -

Strap brake -	1 Item	56-mins lost
Switch burned out	1 "	76 "
Patching Hopper	1 "	22 "

Total loss 8469 minutes.

of this 5261 minutes was lost  
by this troubles in the Motor & driving  
mechanism.

While the belt troubles & other things  
like fuses blowing from overload  
Hoppers etc was 3208 minutes.

The bad show of this Conveyor, was  
due mostly to a Rotten drive  
& I hope it is fixed but from last  
record I think it hasn't & -  
This drive has a horrible record,  
Why do gear teeth break -

# Conveyor Dept Costs, Material

210 days

Beltting-Con	12 601	84	
Miscellaneous	804	60	5
Leather belting	491	96	Rotten
Angls rubber	255	61	
Rollers & bearings	652	86	
Brushes on Con	300	66	Rotten
Sprocket chain	22	46	
Motor Straps	18	74	
12" Scrapers	87	49	
Bearings-	29	87	
Gudgones	18	26	
Bucket Con rollers	1	40	
Maple lagging	73	60	
Canvases	33	40	
Pins	30	45	
Oil chain	1	83	
Pig Lead	2	12	
Labor Repairs-	484	12	
	1591	21	

\$75.76 daily-

225 days

Loss Time in Pkg Plant July 1 to Feb 15-06

Waiting for Cars	3789	minutes
Cleaning up Spills	3975	"
Big Bin Choked	1260	
Making Slide in Stock Hn-	770	
Moving Cement in Pkg Hn	1090	
Cleaning up Overflow Bin	1565	
Big Drive Belt,	575	
Taking up Pkg Hn Belt,	120	
Belt Skipped	120	
Cleaning Drill pkg Hn	475	
Cleaning Bagg-	1020	
Emptying Bags Pkg Hn	70	
Belt off Pkg Mac	60	
Changing Belt on Cars	60	
Pulling on Belt & Repairing	105	
Belt of Screw Con	440	
Waiting for Ocs -	400	
Cleaning up floor	90	
Tying Screw in Pkg Hn	30	
Waiting Tests	140	
Cleaning Screw	60	
Roller at Shift	30	
Oiling hot bearing Pkg Hn	30	
Repair belt Bonnell Mac	65	
	15459	



# Big Caesar

Shovel-Digging bucket	4090	minus
Grudgeon bronze Co	1125	
Drive chain "	980	
Broken wheel-	660	
Conveyor out sides	530	
Motor	550	
Trolley	175	
Hangers broke	570	
Truck "	590	
Off Track	505	
Bearing splat chain broke	165	
Universal motor burnt out	300	
Motor strip broke	40	
Repair bolts Con 145	60	
Repair frame	90	
Union broke	140	
"	115	
"	60	
Pump out rack-	30	
Lense blow	70	
Bracket shaft out	485	
Shaft out bearing broke	150	
Chiller - Grady	590	
Gears broke	100	
Balls slipped in bearings	95	
Bearings broke next big belt	12685	minus



3400  
200

60-

62.  
35

3/375  
175  
500

3500

2170

27-27  $\sqrt{\begin{array}{r} 65 \\ 325 \\ 2170 \\ 1088 \\ 1968 \\ 2193 \end{array}} (149$

210 Days —

146 Screw Concr alongside Cement Stock H.

Digging out Concrets.	22 60 min
Gudgeons.	11 70 "
Broken Hanger.	3 60 "
Repairs (wasting)	2 10 "
Connecting up	1 45 "
Motor three hrs	2 10 "
" Armature burned out.	1 35 "
" Solder melted	1 60 "
" Fuse blew	90 "
Putting blank in	60 "
Covering Concr.	7 35 "
	<hr/> 49 15 -

136 Days - Round-tripped Nov 18

147 - Conveyer to Bagging House

Cleaning out Conveyer	770
" Tail pulley	235-
Hopper	250
Drive belt brakes	195-
Cleaning belt,	155-
Drive shaft brakes,	300
Benninghead pulley burnt out	120
Strap brake	30
Belt shaper	90
" Brakes	120-
" Rapped	25
" Cutting out piece,	105-
Brushes on Conveyer	30
Moving split tail pulley	30
Tail end bearing hat,	30
	<u>2510-</u>

Supplies for Kibi July 1st 210 days -

Radial brick	603 38	Rams Con 126 - 597.00
Nice	88 25	Phosph. etc. 4.41
Asbestos	211 65	Lumber 1.75
Water side	86 48	
Coal feed screw	37 71	
Water Storage	78 38	
10" Pipe Drilling	45 30	
Pump	100 00	
Miscellaneous	874 68	
Coal Drift in wheel shaft	52 28	
Bucket and Churn C	22 98	
Alum	77 26	
Wheel and Bucket	42 00	
Coal Drift	235 00	
Fire Bricks	66 50	
Bucket Crank shaft	10 75	
Drifts - 11" 6	30 09	
Drifts - 11" 6	18 86	
Drifts - 11" 6	220 91	
Cranks	47 30	
Beams	24 05	
Water Pump shaft	6 00	
Water pump	10 20	
Chiller pump	81 98	
Roller plates	344 82	
Drifts	6 35	
Drifts	37 42	
Drifts	34 02	
Drifts	18 45	
Drifts	3 50	
Drifts	1 04	
Drifts	2 00	
Drifts	1 62	
Drifts	1 52	
Drifts	6 15	
Drifts	12 22	
Drifts	2 60	
Drifts	2 00	
Drifts	2 00	

19.26 daily

13  
17  
17

Supplies power plant - June to Jan'y inc 240 days  
 Valves - 272.53 Will this even stop,  
 Oil Cocks. 5.26  
 Diaphragms - 6.00  
 Oil Cups glass 3.71  
 Fuses - 7.00  
 Mms rods 6.78  
 Gauge Stem 1.31  
 Door Liners - 255.56  
 Discs 9.24  
 Front Head 2.50  
 Muds 23.10  
 Storis 235.00  
 Miscellaneous 2524.16 Buy them what is it  
 Grate Bars 435.00  
 Castings - 89.14  
 Valve seats 8.92  
 Hook Springs - 161.50 What's this -  
 pair air Cock 5.26  
 Trick 307.47  
 " Nose - 20.32  
 Turnas Archa 194.50  
 Fire Clay 31.50  
 Boiler Tubes 305.50  
 4671.26

	4671.26
Pipe fittings & pipe	81.47
16" Ball	110.57
Gate Rope	22.42
Whistle	30.00
Piston -	90.00
Sight feed	17.24
Gauges	13.60
Self Closing	35.29
Iron Springs -	6.00
Rings	41.34
Repair Bolter	589.84
Valve	62.64
1st Pump	8.64
Door handles	6.00
Indicator	1.50
Valve Springs -	2.75
Head Pin	24.71
Supplies	9.00
Tin	94.00
Compressor	4.25
Collars	2.56
Machine	7.50
Refrigerator	16.75
Gas Engine	60.60
	<u>6009.93</u>

What's this

What for

	6009 93	
Gauge Cock	4.99	
Chain	1.44	
Tube Expander	5.60	
Valve Springs	3.93	
Floats	15.07	
Stems & Wheel	5.36	
Mitre Gear	280.30	9 9 What's this -
Boiler Compound	340.33	Big -
Pencil bar	3.66	
C9 Baffle	15.98	
Scissors	17.25	
Steam Flow	58.67	
Crank Pin Drivers	52.00	
Valve Pump	2.17	7
Water Stop	0.95	9
Manuel	1.57	6
	<u>6832.14</u>	3

\$ 28.46 daily



1000

$$\begin{array}{r} 2567 \\ 192 \\ \hline 2759 \end{array}$$

1300

3.  
3/10000-day  
3333-

6000 fare  
7000  
3000  
21000000  
10000000

2 to 1

30000000 day

# Electrical Supplies July to Aug Dec 210 days -

Starting boxes	446.00	is this present work
Carbon brushes	475.00	
Ampere fuse plugs	10.09	
Amp Regl-fuse work		
Miscellaneous	1617.16	what is this
Arc Carbons	6.93	
Speed Regulators	326.00	is this a supply
1 HP Motor -	50.00	
Armature Pump Hn	382.00	is this an extra
" Coils -	10.56	
Bearings Motor.	23.38	
Grids	10.82	
Bearings -	15.00	
Motor Straps	7.66	
	3380.60	

\$16.1 daily -

Operating Labor for Repairs 210 days

Shoveling	1032.01	\$ 4.91	daily
Railroad	2167.02	10.30	"
Crusher	1637.39	7.79	"
Mixing	694.30	3.30	"
Chalk Plant	3038.14	14.45	"
Kiln	4139.96	19.70	"
Chalk Grinders	9567.58	45.50	" load
Packing Shipping	7861.75	37.40	" load
Coal Grinders	2063.71	9.82	" load
Power Plant	3148.24	15.01	"
Cold System	796.08	3.80	"
Compressor Dept	484.12	2.25	"
Electric	3363.23	16.00	load-
	40443.53-	19200	daily -

Coal, *from May to Jan'y incl - 270 days*

	Tons Soft	gals Chae	Tons Briquet Coal	Tons Briquet Coal	Total
Quarry	1321				1321
Railroad	981	60			1041
Crusher P	481	256	65	62	804
Mixer P	468	256	65	62	864
Machines	394	178		2	574
Power Plant,	20268	558		4	21130
Kiln	22790				22790

	Tons
Quarry (234 Days)	564 daily
Railroad "	4.45 " 199.80
Crusher "	3.7 " 25.50
Mixer "	3.7 " "
Machinework 270 Days	2.16 " "
Power Plant,	78.25 " "
Kiln	84.50 " "

Quarry	17.76
Railroad	14.01
Crusher	11.65 - 1.32 Cents Ton Day
Mixer	11.65
Machinework -	6.80
Power Plant,	257.00 Daily Cost
Kiln	266.17

Oil - 270 days  
Gals 81323. 301 gals daily -  
Cost, \$23.60 "

7.2 bbls daily this is Rotten

Dynamite.

Pounds. 234 days - 258 lbs daily  
Cost 29¢ Daily -

Output 234 days - 801 tons daily -  $3\frac{1}{2}$  c ton

Car hoist Dump of skip - 176 Dump Crusher

Circuit on Car hoist broke	56
Resistor box burned out	15
Cable on skip weight broke -	104
Chaining large rock	327
Skip wouldn't clear -	21
Cable broke	87
Controlled fingers burned out	20
Tooth on gear skip dump broke	472
Rock stuck in skip -	22
Force wire on skip car hoist broke	49
Motor	10
Intermediate gear broke	227
Long bearing skip dump	8
Circuit wire Car hoist down broke	43
Cable pulled over drum -	24
" " from drum -	10
" Cable Car broke.	13
" hook skip dump pulled off drum	7
Tooth broke - gear skip dump hoist	215
Cable skip dump slipped -	6

1736

8.8 minutes

472  
227  
245  
714

No 1 Dryer 196 days -

Screen shake 783

Shaking mouth shaker 13

Lo power on shaker fan 193

Shaker fan blades worn out 600

Two chert pins in shaker 69

Shaker on shaker 537

250 lbs to cost 250

Shaker Drop Shaker fan broke 28

Shaker fan motor blew 37

Water brush holder broke 21

Young baffles Dryer 206

Unibulor Choker 91

2578

13.1 minute daily

Erving's record 1922 = 196 days -

Screws on generator brake	90
Working on Engine	84
Generator - Belt slipped	103
" Belt run off	130
" Belt Torn in two	353
" Repair	40
" New belt	105
100 V Generator Repair belt	120
" Tinkering belt	162
" Belt run off	169
" Belt broke	70
Repairing five shaft belts, new ones	460
Replaced six, six old bands	236
Set brushes 500 V gen	10
Repair steam gauge	10
500 V Gen threw out	17
" Cable burnt out	20
Reaming Malted	111
Engine without steam	135
	2425

1213 minutes



109 Cows 196 days —

Fence blew	620	
Taking Crops off heaving	39	
lot bearing (ex drives)	938	
Changing Motors	1735	} Driv 5262 minutes
Ornamental Ground out	1225	
Repair Motor	1250	
placing broken handles	75	
" " Idle	25	
loose Clogged	108	
Belt taking up	223	
" Repair	10	all other losses 1354 min
" Joiner 2 by hopper	137	
" Patching	31	
" New belt	178	
Repair gunny chack	29	
	<u>6616</u>	33.7 minutes

Cav 110 - 196 Days -

Coupling chain broken	105-
Mater Res Coal burned	25-
" New bush holder	209
" Changing Armature	284
" Put Grinders in	137
Bearing worn of Exc Drive	436
" Hat "	200
New bush bearing Coupling	180
Belt pulled apart	175
" "	68
Inside Rubber worn	29
Hopper Choked	20
Repair Coupling	55
	<hr/> 1926

9.8 months

Cow 112 - 196 days -

Take up Repair belt. 0	127	
Twice blow	381	
Repair Haffer	18	
New Oil Chain	102	
Broken brush holder, etc.	74	
Overflow Chute	71	
Haffer Clogged	45	
Obdill for 111 piston 0	119	
Mater. Conductions	71	
Repair guide Rubber 0	36	
Piston Turnup -	5	
	<hr/> 1049	5.3

Cow 113 & 114 -

Shooting out saw	228	
Repairing	90	
Repair Saws	215	
Twice blow	29	
	<hr/> 1162	5.9

210 days

# Con 126 —

Head Pulley Drive -	6670
Motor strap broke	130 ✓
" Pulley broke-changing-	225-
Replacing wheels etc	1863
Taking quickie out+putting in	2938
Rent shaft	83 ✓
Overhaul	15-
Oiling 10 wheels	575-
Put Conpling on flex shaft	50 ✓
Replacing broken bushings-	430
Tightening up Con	290
Oil pulley stroke	280
New Callans on Drive gear	70 ✓
Hot bearing	70 ✓
2 new loose on flex shaft	695 ✓
Tightening Callan flex S	190 ✓
Putting loose Callans on Con	530 ✓
New pinion bearing	790 ✓
	15946

76 minutes daily

of the 76 min 32 min due to drive shaft failure

Scrapper  
Clinton Charles Grusher

Broken - repairing	710 ✓
Reps to truck	200 ✓
Made Grusher burned out	70 ✓
Tightening bars & scrapers	65 -
Straighten bars	55
Tighten belts	280
Fire blow	25 ✓
Fire worn grounded	80
Tightening - taking out links -	140
Placing Chipping of fly shaft	50
(Clinton Charles)	30
Car caught on rail & lost from under bed	195 -
Straighten Dr. aft.	70
	1970

9.3 minutes  
daily

Car 125

Bent shaft - broken wheel -	11 65 -
Replacing wheels	3027
Wires grounded	100
Magnet burned out on line to Car	175 -
Fire blow	30
Magnet grounded	30
Wheel burned out	220
Oiling Car	647
Jumped Track	355 - ✓
Broken pins on Drive	65
Chipping hook teeth sprocket	25
	5839

27.8 minutes

Elevator Clinton Grusher

Fire blow	75 -
Tighten belts	85 -
Replace broken bucket	95 -
Tighten loose "	45 -
	300

1.4 minutes  
daily

## Cmv No 130-

Repair belt.	2391-
New belt	347
Hopper blocks	149
Taking up Belt	130
Put on rollers	60
Pkg. "	48
Cleaning Hopper	15
Examining Drive bearings	85
Rect. Skips	40
Taking off 60%	60
With Dust cv	520
	<u>3845</u>

18.3 minutes

Cow 131

Taking up belt,	57½
Belt pulled apart	58
" New ---	2.35-
" Repair ---	2.47
Overload	57
Drives bearing belt,	259
" Changing bearing & adjusting	2.15-
" New bearing & bearing middle	2.00
" left " "	180
" Put Collar on shaft	58
" Reco Chain, right bearing	60
Brush handles of Motor & bearing	24
Repair Motor wires	20
Motor Strap & gears	38
Repair Chain	10
Blocks under Turnup idler	15-
Turning Gear Motor	30
Wires & clew	54
Smoking Oiling, Spel Bros	30
Putting on Idlers	25-
Motor don't start	14
Hopper blocked	35

2439

11.5 min daily

## Con 135-

Hopper choked	45
Repair chute	31
Overhead	23
Putting on running bands	8
Fixing, oiling, cleaning bearings	160
Taking up belt,	297 ✓
Belt slipped	69 ✓
" New -	53 ✓
" Repair	134 ✓
Putting on running idler	75
Placing guide pulleys	12
Chain & Bottom shaft	132
Chute choked	11
Feeder blow	102
Motor stop	73
	<u>1223</u>

5-8 Minute

daily

## 139+140

Repair Gudgeon	795
Screw shaft & Galls -	335
" Choked	165
" Brake screw	265
" Cleaning out	52
Feeder blow	80
New fly wheel bearing	58
Brake roller, Motor brake	16
	<u>1786</u>

6.5 Minute  
daily

## Coal plant

## Engine -

Brake down	60
Bottom pressure	20
Fixing "	1010
	<u>1090</u>

## Con 99 - about 1000 - 1000 - 1000 - 1000 -

Take Mills -	
Repair belt	270
Fixing belt,	80
New belt,	60
and belt broke.	95
Changing feed belt,	20
Belt broke.	65
and screw broke.	315
Take Mills fixed broke screw	255
New worked loose	70
Belt choked	30
Changing feed	40
and belt bearing broke	25
and belt inflames "	50
and fine screens under rolls	30
and fine screens	30
Rolls slipped on screw	130
Rolls in Galls	315
and broke	30
and fine screens	10
	<u>1923</u>

9.1 Minute  
daily



Carb. Rolls — 210 change —	
Rolls changed	461
Shift belt	430
Repair fly wheel bearing	300
New Cranking Shaft roller Hopp.	525
Tightening Rolls	150
Roll bearing Roll	35
Hopper Checked	45
Rolls Checked	150
Repairs Roll pulley	300
Tightening belt on pulley	20
" " Elevator	60
Taking out & putting in screens	55
Putting on belt	120
Reaming Roll & lines & under roll	45
" Back H "	60
Creeping Chain broken	40
	<hr/> 3011

143 mins  
daily

Total losses all plants

		Daily operating time	Can be reduced to
Quarry	475.0	1.27	246.0
Crusher	244.5	6.14	157.3
Chalk	249.3	18.00	127.4
Ribn	240.0	20.00	156.0
Picking	159.0	7.21	90.0
Cement Grinding	362.0	16.00	120.0
RR	1.8	0.0	0.0
Chalk Crusher	183.0	21.00	53.0
	19150.		9497
31.9 Hours daily =			15.8 hours daily

			Can be reduced
Quarry loss % of Total possible Time	80%		46%
Crusher	"	10 min	24
Chalk	"	22 "	12
Chalk Crusher	"	24 "	2
Cement Grinding	"	22 "	19
Ribn	"	24 "	10
Picking	"	10 "	15

### Remarks

Quarry - Enough Cars & skips must be provided so there is no waiting for Cars - We have 150 & it is possible that if we get a big capacity on we cannot supply ore for an average of 5000 bbls daily & may need 50 more Cars

A large Motor should be put on No 4 & less drop in line - Machinery says this is being done -

Better Cobblers on Rolls in Crushing plant - bad delays here -

Don't send so many extra large Chunks to Quarry - Machinery tells me of an air drill something like a Riveter that is fine for 60 cks taking 12 minutes per each day on Effluent suggest to save Dynamite that Blue Rock be thrown out nearly as big as Limestone -

Fans on ship dump are not  
strong (1-6) wide enough for the  
Sudden Extreme torques —

There is too much loss of time  
from waste of power on Exhaust  
fan No 1 Dryer - Pump, and  
this will be fixed when  
new power plant is OK  
also lost time on fan blades  
Suggest an Extra fan wheel  
be made & stored in Dryer

The flexible shaft drive on large  
Conveyors is the principal  
Cause of delay & something  
must be decided about  
what change shall be made  
here - also Heavy Motors  
are necessary on account of  
Overloads & heavy starting  
torque on the motor —

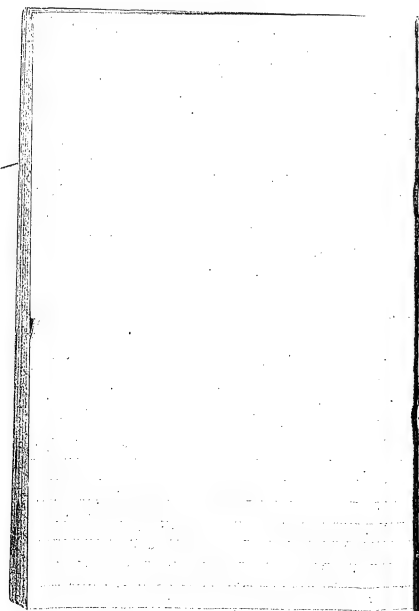
Suggest chilled bushings in  
links, wheels & bush it nuts in  
for 125 & 126.

Quicker & more convenient means  
for changing plates on  
grinders —

Aprons fixed on kilns

To much less time on  
Generator Coal plant,

Suggest that to prevent Belt  
wear very fine stuff be put on  
belt feeders Coarse stuff is  
dumped on. This will make  
a great saving in wear



19.74  
76.34  
94  
7.66  
47.66  
40.29  
196  $\overline{) 191.64} (9$

**Edison Portland Cement Company Records  
Plant Operations Notebook, N-99-07-01.2**

This notebook is a continuation of N-99-07-01.1. It was used by Edison for notes and calculations relating to operations at the Stewartville works during the period July 1905-February 1906. The entries concern plant capacity and losses in time. The front cover is marked "Cement." The pages are unnumbered. Approximately 60 pages have been used.

N-(99-07-01.2)

208 ) 800 (7

137  
260  
61  
36  
23  
159  
20 ) 676

137  
260

Cars stuck on <sup>South</sup> <sub>mainline</sub>

Stems	Minutes
3	13
3	12
1	3
2	25
1	5
1	10
1	4
1	19
1	14
1	14
1	3
2	7
1	5
20	137

Cars off track

1	98
1	25
1	40
1	63
1	13
1	16
27	260



Cars struck foot under

Item	
2	8
1	3
1	7
1	14
1	19
6	61

Cars run over saw table

1	9
1	7
1	5
1	4
1	7
1	7
6	56

Cars refused to stop

1	7
1	5
1	4
1	3
1	4
5	23

Truck blocked with Coal Cars

Item	
1	63
1	62
1	24
3	159

All proceed  
Loss 3.5 million

Uploading for Rock

1	157
5	146
4	125
2	133
5	160
1	238
8	113
3	140
2	602
8	247
3	

3	199
2	157
5	150
3	10
1	220
8	58
1	170
4	74
4	162
1	7
1	75
2	71
3	54
5	61
3	327
3	2
6	210
7	173
3	156
8	201
3	254
7	261
2	148

Waiting for roots

356	1246
285	1176
278	425
406	346
161	649
542	524
739	679
817	603
527	318
676	1300
1137	582
749	434
988	344
1452	439
754	651
820	413
931	428
537	66
656	711
	842
	305

13151

12497

10  
11

600 1500 (2)

60 150 (2)

July 1st to Feb 1

|||||  
26  
208

13151  
12497  
24064  
24064  
64

40 25648 (42.7)

600 25648 (123)

Waiting Back -

Total loss 25648 -

208 working days -

loss average daily

123 minutes -

which at rate of 180 tons hour

3 tons min or

123  
369 tons daily loss Capacity

All other losses do not  
exceed 4 minutes daily  
or loss of 12 tons daily -

CP waiting for -

72  
41  
63  
64  
56  
22  
51  
37  
50  
45  
50  
28  
32  
36  
41  
59  
48  
12

909

208 / 809

Grants -

5  
4  
368  
272  
45  
29  
313  
21  
37  
10  
20  
34  
125  
23  
44  
59  
74  
29  
35  
89  
78  
15  
37  
18  
48  
475  
10

196 Days -  
minutes lost  
11.8  
2324  
1964  
364  
1960  
1088  
1664

11.8 minutes day  
3  
35.4 tons lost

|||||  
26  
172  
174  
178

2324

14  
10

72647

1st 36

25

345

83

38

25

14

20

121

15

43

21

117

253

98

59

24

28

130

123

10

1472

196 days 1472 minutes lost  
1392 7.5  
1000  
7.5 minutes lost daily  
22.5 hours

8  
6

2nd 36

132

86

47

64

30

22

227

17

85

58

52

61

63

33

14

363

34

1388

196 days 1388 minutes lost  
1372 7.1  
2120  
7 minutes average  
21 times less exposure

6  
7

$$27836 =$$

179  
24  
141  
115  
62  
71  
33  
66  
135  
53  
324  
181  
71  
46  
242  
106  
66  
111  
52  
52  
59  
41  
178  
61

9  
11

2472

1961-1962 / 2472 / minute lost  
392  
1778  
126  
126 minute camp  
378  
time lost

Oil table CP-

22  
22  
37  
37  
20  
20  
27  
5  
220

Hoppers in CP

144	43	31
16	322	
92	43	
18	47	
204	19	
173	24	
54	116	
112	276	
32	49	
138	312	
63	24	191
341	47	
97	38	
97	129	
1593	1491	

1543  
1491  
3034  
1074  
1960  
244  
154  
462  
minute lost  
154 minute day  
time

Car hoist skip dump

$$\begin{array}{r}
 56 \\
 15 \\
 89 \\
 11 \\
 105 \\
 61 \\
 17 \\
 26 \\
 492 \\
 22 \\
 122 \\
 34 \\
 \hline
 950
 \end{array}
 \begin{array}{r}
 227 \\
 58 \\
 31 \\
 25 \\
 63 \\
 283 \\
 79 \\
 \hline
 760 \\
 950 \\
 1718 \\
 1568 \\
 1482 \\
 \hline
 1372
 \end{array}
 \begin{array}{r}
 196 \overline{) 1718} \quad 8.7 - \\
 \underline{1568} \\
 150 \\
 \hline
 8.7 \\
 26.1 \text{ tons}
 \end{array}$$

Engine Room No 1

$$\begin{array}{r}
 79 \\
 78 \\
 28 \\
 98 \\
 33 \\
 43 \\
 23 \\
 94 \\
 40 \\
 \hline
 516
 \end{array}$$

$$\begin{array}{r}
 196 \overline{) 516} \quad (2.6 \\
 \underline{392} \\
 124 \\
 \hline
 117
 \end{array}$$

$$\begin{array}{r}
 2.6 \\
 3 \\
 \hline
 7.8 \text{ tons} -
 \end{array}$$

Dryer No 1 - CP -

14  
43  
45  
91  
100  
76  
608  
232  
112  
185  
191  
209  
470  
240  
2619

196 ) 2619 ( 13.3  
1969  
650  
391

13.3  
39.1 low lost

Capacity 60 tons hour

Feed Problem in Byon

20  
50  
14  
196 ) 840 ( 4.3  
784  
56

4/10ths of ton daily

Chalk Hills - No 1 July 1

85-  
363-  
110  
248  
190  
11  
37

137  
99  
47

174  
202  
88

5830  
2570  
2438  
41

730  
424  
4424  
1427

365  
1908  
2998

558  
1536  
618

739  
27789

196 / 27789 (minutes)  
196  
884  
342

141 minutes - at 30 tons bar.  
70.5 tons daily loss  
9 only find record No 1 Bell.

12  
12  
9

Eng No 2

61

115-

157

178

107

90

63

60

460

58

246

124

111

75-

41

228

58

389

63-

115-

85-

41

145-  
3070

10  
11

196 / 3070 (156)  
196  
1288  
13800

Got to home  
1 time

156 average minutes per day  
156 tons daily



# Electrical Time Log -

25  
 80  
 108  
 316  
 48  
 56  
 53  
 51  
 60  
 90  
 87  
 1082  
 153  
 93  
 45  
 65  
 25  
 15  
 120  
 2576

7

196. 2576 / minutes  
 1960  
 616  
 360  
 28  
 13.1, minutes lost during

Blower No 1 Blower

$$\begin{array}{r} 30 \\ 23 \\ 4 \\ 12 \\ 17 \\ 21 \\ \hline 196 \overline{) 1118} \end{array} \begin{array}{l} .56 \\ 80 \\ 00 \end{array}$$

$\frac{1}{2}$  minute daily

Oil System blower

less than  $\frac{1}{2}$  minute  
daily

1#36 Roller cleaner C-

$$\begin{array}{r} 75 \\ 110 \\ 65 \\ 70 \\ 165 \\ 205 \\ 90 \\ 65 \\ 38 \\ 125 \\ 95 \\ 1440 \\ 86 \\ 310 \\ 725 \\ 75 \\ \hline 3734 \end{array}$$

3734

$$196 \overline{) 3784} \begin{array}{l} 19 \\ 196 \\ 178 \\ \hline 2060 \end{array}$$

19 minutes daily

2nd 36 Rolls Chunks C

665-  
310  
240  
490-  
45-  
20  
125  
50  
75-  
70-  
1225  
2332  
370  
73-  
1440  
100  
255-  
725-  
270  
4  
9  
4  
8932

196) 8932 (45.5  
784  
1092  
980  
1120

45.5 minutes lost  
daily

Coalbrushy Roll

340 425-  
270- 5-  
160 125-  
162 270  
50  
765-  
430  
100  
115-  
235-  
525-  
53-  
30  
3196 3  
4

17.7 minutes lost  
daily

20.180) 3196 (19.7  
180  
1396  
1200  
196

Blower House 102 -

40  
59  
103  
52  
45  
75  
19  
59

Blowers only

196  $\begin{array}{r} 454 \\ 392 \\ \hline 628 \end{array}$  23.

2.3 Minute Leaf  
daisy

Engine 103 - 24

4  
63  
83  
26  
75  
202  
70  
529  
221  
98  
617  
61  
71  
43  
26  
8

210 7

196  $\begin{array}{r} 2216 \\ 1960 \\ \hline 256 \end{array}$  (113)

11.3 Minute Leaf Only

Borden Room ~

52	445
444	455
127	465
158	231
1613	369
460	29
422	120
997	6217 3
3438	
3821	
4809	
3143	
1231	
1135	
539	
356	
1600	
24295	

124 Minutes daily

196 / 24295 (124)

Conveyor 101

87
11
13
235
22
231
31
35
109
87
107
95
15
1113

196 / 1113 (57)

5.7 minutes at 3 tons min  
to Plant Capacity

Canv 102

9  
5-  
115  
13  
24  
65-  
34  
284  
141  
191  
65-  
63  
76  
37  
116  
1298

6  
6

196) 1298 (16  
1176  
1220  
6.6 minutes daily at 9 km  
19.8 Daily loss to CP plant  
Cape Fear

Can 104

40  
94  
16  
162  
151  
209  
262  
508  
83  
52  
54  
649  
340  
84  
398  
155  
140  
45  
3472

7  
9

196) 3442 (17.5  
1982  
1460  
1372  
16

17.5 minutes daily  
52.5 - daily loss apparently to  
CP

Cano 109-

70  
138  
70  
142  
256  
155-  
302  
1757  
1484  
40  
1030

5444  
Oct 17. new water -

1111  
28  
134

72 1232 (13.4)  
1232  
36

68  
20  
90  
92  
77-  
73-

~~1030~~

131  
50  
120  
30  
479  
1232

194 5444  
1232 (34)  
5444  
364

34 minutes for food daily  
at 1 hr. pause -  
34 hours daily -  
1042 up after by road  
13.4 minutes  
lost in loss  
daily or 13.4 tons daily  
to Chalkfoot

110-Cm -

110  
27  
75-  
36  
242  
58  
45  
127  
196  
213  
260  
410  
213  
2012

194 2012 (10.2)  
19820  
1530

10.2 minutes lost daily  
10.2 tons loss output

111 Cm -

576  
670  
22  
329  
377  
264  
419  
23  
130  
72  
504  
130  
633  
9  
170  
63  
75  
181  
141  
913  
543  
170  
161  
117  
38  
18  
6750

54 186  
6750  
5580  
1178  
540  
363 minutes daily  
363 tons capacity

10  
11

112 Cm -

29  
20  
18  
48  
35  
94  
24  
177  
118  
119  
13  
27  
83  
107  
17  
12  
1059 41

194 1059 (584)  
980  
790  
780  
5.4 minutes daily  
5.4 tons capacity



113-Con Screw-Chalk plant.

Aug 15 to Aug 26

50  
50  
179  
67  
26

Aug 130  
346  
266  
400  
144  
11111  
26  
15

2.6 minutes a day loss  
to Chalk plant

114-screw

298  
45  
298  
20  
9

196  
816

196  
816  
71

4.1 minutes lost  
due to chalk  
plant

~~24~~

24

Conveyor 125-

70  
30  
1205  
270  
175  
60  
517  
951  
2883  
45  
430  
97

5877

24  
186  
5877  
3584  
2293  
1110

31.6 minutes lost daily

Cmo-126-

30  
90  
140-  
45  
570  
60  
270-  
55  
530  
290  
538  
3545-  
2465-  
20  
2290  
225-  
1015-  
150  
1395-  
1280  
1140  
16083

196 / 16083 / 82  
588  
403  
82 minutes lost daily  
55  
1

101 Cms-

40  
50  
35-  
95  
45-  
35-  
196 / 300 (15)  
196  
1040  
1980

1 1/2 minutes lost daily

124 - Chilled shoescraper

285-  
245-  
490  
395-  
25-  
105-  
120-  
75-  
195-  
20  
70  
20  
2045

196) 2045 (10.4  
196 856  
10.4 minutes daily  
loss to Chilled shoescraper

130 - 36" belt, Cement Grindmill

136  
61  
58  
25-  
117  
38  
69  
170  
584  
1336  
610  
36  
526  
120  
3889

196) 3889 (19.8  
196 1929  
1929 160  
19.8 minutes, last daily

Can 131

57  
203  
195  
93  
283  
96  
252  
28  
111  
43  
237  
415  
65

2072

196/2072  
196  
1120

10.6 minute last day

132 -

284  
270  
323  
39  
1044  
354  
118  
33  
265  
121  
722  
27  
45  
41  
421  
54  
38

4199

64

196/4199 (21.4)  
3829  
7960  
830

21.4 minute last day

Can 137

171  
445  
863  
127  
92  
408  
87  
84  
1270  
55  
81  
520  
158  
1027  
280  
153  
2012  
31  
80  
73  
90  
136  
747  
8990

S. Dump Blower

196/8990/458  
7840  
1420  
9430  
7

45.8 minutes lost daily  
55  
1

138 - Tunnel Blower H#02

33  
100  
53  
38  
44  
48  
75  
102  
78  
56  
125  
32  
32  
26  
316  
69  
73  
1303

196/1303/66  
11960  
127  
6.6 minutes lost daily

139 - screw Cap Brown H

$$\begin{array}{r} 151 \\ 349 \\ 151 \\ 422 \\ 80 \\ 57 \\ 57 \\ \hline 58 \\ 1331 \end{array}$$

196) 1331 (6.7  
 $\begin{array}{r} 1196 \\ 1332 \\ \hline 1370 \end{array}$

6.7 minutes lost

140 - screw - Brown H - No 2

$$\begin{array}{r} 12 \\ 280 \\ 16 \\ 24 \\ 3 \\ \hline 138 \\ 473 \end{array}$$

196) 473 (2.4  
 $\begin{array}{r} 392 \\ \hline 810 \end{array}$

2.4 minutes lost

Con. 143 - to Cement Skk 4.

64  
30  
60  
60  
15  
53  
282

196) 282 (14  
196  
86

14 minutes out

144 Honda Cement Skk 4.

60  
172  
255  
80  
262  
124  
45  
1028

196) 1028 (52  
980  
48

52 minutes out

Engineer's Plant  
Waiting for speed -

70	60
84	73
64	41
44	33
47	08
46	60
54	27
56	17
26	10
17	40
68	103
16	43
12	92
11	04
2	08
7	62
1	-
1	125
5	-
0	135
4	-
9	119

LF

1905-

Record missing

128  
89  
91-  
163  
56  
92  
58  
35



Car 99-

16  
 25  
 8  
 18  
 77  
 52  
 19  
 44  
 41  
 196  $\overline{) 300}$  (15)  
 192  
 104

$\frac{1}{2}$  minutes loss capacity  
 Cpl. limit

Changing Tripper RP-

104  
 92  
 87  
 196  
 32  
 34  
 112  
 43  
 38  
 55  
 467  
 152  
 27  
 38  
 46  
 33  
 52  
 19  
 68  
 158  
 1853

196  $\overline{) 1853}$  (9.4)  
 1764  
 89  
 9.4 minutes lost  
 Changing Tripper  
 Chas. Reed

Can 190

89  
80  
424  
183  
84  
421  
1293

190) 1283 (65  
1170  
1070  
6.5 Minutes lost

~~191 Cans~~  
Quarry -  
Waiting for Cans

430  
785  
460  
150  
850  
430  
640  
600  
375  
160  
435  
750  
1598  
2173  
1590  
1353  
12781  
16663  
24446

1830  
2970  
1535  
1975  
2265  
1875  
2815  
1400  
16663  
29446  
244  
3080  
1820  
1420  
241 Minutes lost  
circle

July 1 Dec 18-

1111  
26  
24  
104  
122 days

241  
182  
72  
241  
241  
241

2413

dec 122  
244  
3  
7

Quarry

Cleaning (ending track)

135	450
590	480
590	443
590	220
515	490
455	170
235	500
685	315
555	485
715	315
670	175
540	500
250	
120	
625	
275	
505	
275	
115	
290	
445	
9080	

$$\begin{array}{r} 7080 \\ 4490 \\ \hline 196 \overline{) 1357} \\ \underline{1216} \\ 1410 \\ \underline{1360} \\ 50 \end{array}$$

69 minutes lost

Quarry

Moving (shovel)

190	655
190	452
290	580
315	585
225	463
665	927
365	1020
240	500
235	470
745	315
320	770
350	6742
390	
355	
610	
570	
780	
1055	
310	
272	
452	
8369	

$$\begin{array}{r} 8369 \\ 6742 \\ \hline 196 \overline{) 1695} \\ \underline{1542} \\ 1537 \\ \underline{137} \end{array}$$

77 minutes lost  
clay



Delays RR

overweight	Car off track	Heavy loads	Derails	Struck by car
5 7 4 <u>4</u> 20	12 40 63 5 13 16 <u>149</u>	6 6 <u>12</u>	23 <u>—</u>	
Carried Crops	Production on Car	Congested Tracks	Cars stuck	Locals pulled out
9 <u>—</u>	4 <u>—</u>	24 15 10 25 6 <u>100</u>	3 18 21 13 19 <u>76</u>	9 <u>—</u>
	Brilliant <u>12</u>			Chas. Strickland 15 7 <u>22</u>
18 179 178 37 <u>316</u>				





[illegible]

Oct 3 to Oct 13 No 1 netting 10 days  
Newbury -  
from Dec 12 to Dec 19 Newbury - 7 days  
Dec 22 to 26 " 4 days -



Check

-666

Loss daily			Hours	Hours
CP - 7	1500	244.5	4.4	157.3
Check	400	249.4	4.9	127.4
Check - Center	50	183.0	3.3	53.0
Count of center	250	362.4	6.2	120.0
Quarry		475.0	8.0	246.0
Ref.		1.8	1.8	0.0
Ribn		240.0	4.0	56.0
Phy -		1915.0	21.39	959.7
	60	180.5		
		53.0		

$$60 \overline{) 959.7} \begin{matrix} 16. \\ 60 \\ 357 \end{matrix}$$

CP. Working Rock	123.0
Okay the Quarry	6.7
Byss	3.0
Quarry - Hopper	11.6
But plant	13.0
	<u>157.3</u>

Quarry - Enough Cars skips so there is no  
waiting for Cars - will have 150

### Crushing Plant

50 or greater HP Motor on No 4, and less  
drop of V belts on line,  
Stronger Chain - less repairs on trippers

1. 2 & 3<sup>rd</sup> 36 Rolls, better waterfalls,  
Does send so many large chunks from Quarry  
12 1/2 minutes lost every day from this cause  
alone, or 7 skips daily -  
gears on skip dump not strong enough -  
See that Exhaust fan at Crusher always  
has power it and also that the fan blades  
are removed out of mill time by having it  
down nights, or use of an extra wheel -  
4 minutes lost daily - Extra wheel best  
- Starts at Crusher -

Have sufficient skips & Cars so will never  
wait for Rock - 123 minutes saved daily  
which at 180 tons hour is 360 tons increased  
output daily -

~~Chalk & Coal~~

Flexible shaft, Drive + head drives generally  
Shafts - pinion + bearings of heavy Conveyors  
Too light + Cause lot of delay -  
Should be changed.

New rolls in Chalk + Clinker grinding  
large bearing surfaces, plenty oil -  
Wider drive/belts - No shear pins -

Chilled bushings in wheels + on shaft.  
125 + 126 Conveyors -

132 Conveyors put in new way -

Big Cessars taken out + fixed cessars  
put in -

Quicker + more convenient methods  
devised for changing plates on fine  
grinders -

Aprons fixed on kilns =  
Too much loss time at Generator Coal plant.

from studying belt wear, I think wear will  
be greatly diminished if very fine stuff  
is first put on belt before coarse stuff  
is dumped on -

feed screws tube will stick, plug & break  
too much,

**EDISON PORTLAND CEMENT COMPANY RECORDS  
PLANT OPERATIONS - POCKET NOTEBOOKS**

**Edison Portland Cement Company Records  
Plant Operations Pocket Notebook, PN-01-00-00.1**

This undated pocket notebook was used by Edison and an unidentified author for notes, calculations, and drawings relating primarily to prospectors' surveys in the vicinity of Stewartville and the analysis of collected samples. Included are notes from surveys conducted by Edison and Francis R. Upton. Most of the drawings are topographical sketches. Near the end of the book are notes and drawings pertaining to blowers and oil feeds. The front cover is marked "Pass Book." The pages are unnumbered. Approximately 40 pages have been used.

9 W. line Cement 2.7 acres  
farm plot over creek  $\frac{16}{43}$

Record of the Long Assay line  
of holes across the property  
of Samanthu Cobart at the  
old lime kiln

Hole 100 Adomite Dep. marker

101 " "

102 " "

103 " "

104 " "

105 " "

106 " "

107 " "

Between 107 and 108 into  
near the large outcrop

Two samples were taken of  
this outcrop of rock - one  
was on the west side  
was thus marked. The  
other was on the East side  
and nearly on top. It  
was also marked but


side sample Carhart  
outcrop same Kilm

Hole No 108 not being  
deep enough to get the  
blue rock as it was first  
understood was wanted  
the men went deeper  
and got fair samples  
of blue rock.

I did not measure  
this hole as to depth  
on the stripping sam-  
ple was taken how-  
ever, one only. I  
believe and marked  
Hole No 108



Hole No 108 continued  
The dip of the rock is  
about

EX  → W dipping East

Si	al	Fe	Ca	Mg
7.44	1.77	1.38	85.28	2.18

as this hole is within 6 or  
8 feet of the outcrop  
being West of it, it should  
show limestone, but it  
is in very thin limestone  
and resembles cement rock  
rather than limestone

12 ft from top

Si	al	Fe	Ca	Mg
12.73	5.38	2.67	74.21	3.80

Hole No. 109 was treated  
the same as hole No. 108  
and sample taken. The  
laminations appeared  
to be about the same.  
The dip was a little  
lower angle than hole  
No. 108

I did not myself take  
sample 109 or measure  
the depth of hole or the  
stripping

Hole No 110


Sample taken from this  
hole it was not down to  
where the rock was so  
blue as Nos. 108 and 109  
did not sample it my-  
self. The dip was toward  
the East and at a higher  
angle

E  W

Should say it dipped  
45°

Hole No III

Sampled by myself about  
9 feet deep. Dip  $45^{\circ}$   
to the East

 Took samples  
along the dip.

Stripping 3 feet before the  
bottom rock core where is  
reached

No. 1 sample is taken about  
1 foot below the stripping  
line

Sample No 2 middle way  
between stripping and  
bottom sample

\* 3 sample nearly at  
bottom

\* 4 sample was taken  
from the bottom

### Remarks

None of the samples taken from holes III to 124 are fair samples of the real rock because they are very much weathered and leached out and have clay in the cleavage seams of the many thin laminations composing the rock some are very much decomposed the limestone leached out while other laminations are hard, but even these have nearly lost their blue color.

There are also many places where a certain lamination is entirely leached out leaving only pure clay.

One or two places  
in the halves show seams  
1 to 2 feet wide the  
whole depth of the hole.  
One particular hole  
shows the whole of the  
strata on one side  
leached out leaving  
only the clay.

Hole 112

Depth 21 feet 9 inches

Depth of stripping 4 ft.

this hole had a clay  
seam one foot  
wide.

3 samples were taken  
from this hole top  
middle and bottom

marked 1-2-3

Dip is East about  $45^{\circ}$

3rd Sample

S. al. Fe. Ca. Mg.

22.52. 5.96. 22.4. 62.32. 1.28.

Hole No 1/3

This hole is 12 feet deep

3' 14" 5'

Box

all sample taken  
on West side of  
hole

No. 1 sample taken on foot  
from stepping, No. 4 sample  
from bottom, No. 2 & 3  
at intermediate points.

There is also a clay  
ream in this hole 1 1/2  
feet wide reaching  
from top to bottom  
dipping some angle as  
shown which is 45 deg

NO 1

S <sub>1</sub>	at	Fe	Ca	Mag
1617	7.33	1.74	71.52	241

## Hole 114

This hole 12 ft 6 inches  
deep. Stripping 3 feet  
angle of dip  $\nearrow$  38 degrees  
towards east.

Rock shaly and down-  
fauled. No. 1 sample  
1 foot from stripping  
No. 4 sample at the  
bottom. 2, 3 taken  
at intermediate points



No.	wt	Fe	Cu	mg
1727	8.47	2.	69.24	0.28

### Hole 115

8 feet deep only one sample taken at bottom. Rock ill defined, much decomposed. Can't say as to dip.

### Hole 116

Depth 15 ft. 6 inches  
stripping 5 ft.  
Four samples taken.  
No. 1 within foot of stripping line. No. 4 at bottom. Nos. 2 & 3 at indeterminate points.

Hole No. 117  
18 feet deep. Stripping  
4 feet. Rock fairly  
good, not true. 3 sam-  
ples taken as recorded  
but think 4 were taken.  
They were taken in the  
same manner as all  
the other holes.  
The dip is clearly  
perpendicular.

Hole 118

12 feet deep. Stripping  
5 feet

Rock quite shaly  
and rotten

3 samples were taken

No. 1 Top

No. 2 Intermediate

No. 3 Bottom

Dip perpendicular

Hole 119

Depth 9 feet

stripping 7 feet

Only one sample taken

only sample

	Si	Al	Fe	Ca	Mg
1374	550	230	7566	121	

Hole 120

Depth 18 feet

Stoppings 9 feet

five samples were taken

No. 1 at top No. 5 at

bottom other intermediate

Get ship

Hole 121

Depth 11 feet

Stripping 4 feet

3 samples No. 1. Top.

No. 3. bottom No. 2. inter-

mediate

cut the dip.

Hole No. 122

Depth 26 feet 6 inches

Stripping 6 feet

4 samples marked

but I think there were  
5 taken as ~~the~~ in the  
other holes. The rock  
is fair in this hole

On line as it is some-  
what decomposed. It is not  
as thinly laminated as  
in previous. The trend  
seems to coincide exactly  
with a line between the  
valley mountains

Drill No. 5

68 to 75 ft. Chaps

1923 965 6289

Hole No. 123

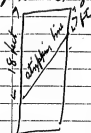
Depth 11 feet

stripping 4 feet

Rock rather rotten &  
shaky. 3 samples were  
taken in usual manner

224 Dol  
 225 1455 557 76.50  
 226 Bat 462 251 91.22  
 232 310 195 92.22  
 233 Dol  
 249 Quantity  
 Drill hole 5  
 Core 57 to 63 ft.  
 17.07 9.00 65.55 53.4  
 Core 63 to 68 ft.  
 9.30 56.1 80.99  
 68 to 76 ft  
 12.74 746 72.44 58  
 Chips Drill 15  
 50 to 57 ft clip  
 18.84 1163 61.39  
 57 to 63 clip  
 16.65 1286 61.17  
 63 to 68 ft clip  
 10.97 733 77.28

Hole No 124  
 Depth 21 feet



This is evidently the side  
 of a decomposed pocket  
 at hole 3 samples  
 are marked as taken  
 on my books but think these  
 were from. They were  
 taken in the usual way  
 get dip.



237 4.72 38.1 91.41

238

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

237 4.72 38.1 91.41

238

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

Hole 125

Depth 7 feet

Stripping 4 ft 6"

Only one sample from bottom and this rather weak.

Hole is not deep enough

Hole 231 Bell

9.49 854

230 bottom 6.36 620 86 67

234 Bottom Delamere 5.38 526 87 92

235 6.59 483 87 16

236 Dal

238 Dal

248 Dal

216 1724 903 68 10

220 Bot 3.83 244 89 04

isolated outcrop sample  
taken by Upton & myself

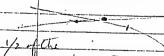
Sample OCS No. 1

is the first outcrop from  
the private cemetery on road  
between Glenwoodville  
passed off it is 300 ft  
to corner of graveyard

OCS means Outcrop  
Sturdevantville -

OCS No. 2

is first outcrop ~~from road~~  
RR in cut going SW and  
two ~~straight~~ <sup>parallel</sup> ~~parallel~~ <sup>50</sup>  
@ 100 feet beyond the point  
where RR crosses

  
1/2 of the  
Sample is from Right hand  
side of the other 1/2 from left  
hand side 200 feet beyond  
going towards East  
angle of dip appears to be

60 deg. dip to SE  
Shooting beyond outcrop leads  
into a ~~cut~~ <sup>cut</sup> 30 feet  
to RR tracks how much  
further east see

# OCS No. 2

This sample is the 2nd outcrop along RR going to Euston. Beyond the 2nd road under RR, should say it was 1200 feet beyond its within 50 ft. of a white pond on right side of RR going toward Euston. Right in center of cut dip is 50 deg. about SE.

It is the outcrop which shows an apparent junction between Magnesian limestone & Carbonate. Sample 3 is lower part next track & appears to be Magnesian

# OCS No. 4 is the

upper part of outcrop & appears to be Carbonate or Cement rock.

This sample is a conglomerate of OCS 3 -

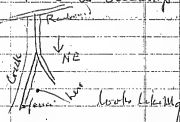
is a conglomerate of quartzite & limestone & rock (see sketch) cut out. The rock is hard -

Sample 2 is 5' pale

WE from this road under track

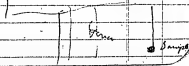
OCS No. 5 is an outcrop  
~~on the bank~~ just ~~from~~  
 on the bank across the Creek  
 you go on the Calvert road  
 under RR. then about 5 or 600  
 feet on the road you look  
 across the Creek 12 to 1500  
 feet at right angles to the  
 road. To the left there  
 is the outcrop  
 look at front 2 outcrops  
 25 ft apart —

OCS No. 6 is outcrop

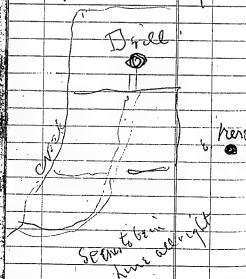


OCS No. 7

on the road thro the field  
 from Creek going to S side when  
 they turn water  
 D. B. ell



807 OCS  
The outcrop is  
just under a tree along side  
the fence

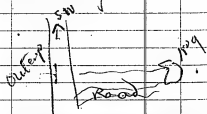


808 OCS  
Outcrop on Hulgys  
property - about 80 ft  
back of hole we got  
permission to put down  
This hole is on base of hill  
in line with the holes  
across Cahart but the  
outcrop is 300 ft about  
South W of the Hulgys  
1st hole  
There is 2 outcrops but the  
is lost on a mound  
R.R. about SW -

O.C.S.

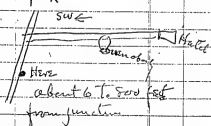
N<sup>o</sup> 9 is outcrop beside  
a limestone 5 or 600 feet  
from Hotel at Alameda with  
going S.W. its on the  
right hand side &  
say 1/8 @ 1000 feet from  
road - Dep 4.5 to 50  
deg massive ch. p. & g  
Mag -  
Dips to SE

ON the road exactly  
across from outcrop  
C Road Crops cut



O.C.S.

Sample 10



its p. bly Mag. Diagram

Should show road on left  
right side instead of left

103, Cabant 17000.

This is the second line  
across Samanthas  
Cabant property  
behind the grave yard  
across the Railroad.

Hole 126 starts at the  
fence near the Railroad  
9 ft 6" deep 2 samples  
No 1 near top No 2 at  
Bottom stripping  
4 ft 6"

Hole 127 advancing  
toward the graveyard  
16 ft 2" deep  
stripping 14 ft 6"  
One sample taken at the  
bottom -

Hole 128 advancing  
towards grave yard  
12 ft deep stripping  
4 ft - 3 samples  
No 1 near top No 3 at  
bottom No 2 intermediate



Holz 129

9 ft deep stripping  
3 ft 2 samples taken  
one near top No 2 at  
bottom.

Holz 130

14 ft deep 5 ft stripping  
3 samples taken No  
near top No 3, at bottom  
No 2 intermediate,

Holz 131

13 ft 4" deep 5 ft stripping  
3 samples taken No 1  
near top No 3 at bottom  
No 2 intermediate,

Hole 132

14 ft deep stripping 11 ft.  
one sample taken at  
bottom,

Hole 135 S.S.

9 ft deep 5 ft stripping

2 samples taken No 1

Top No 2 bottom  
to this hole numbered  
right —

134.

9 ft deep stripping  
7 ft one sample

---

136 10 ft deep  
6 ft stripping -  
2 samples taken -

137 11 ft deep

10 ft stripping one  
sample taken  
probably rotten

138 7 ft deep

5 ft stripping one  
sample probably no  
good as hole not  
deep enough -

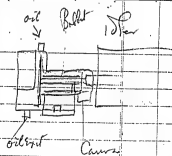
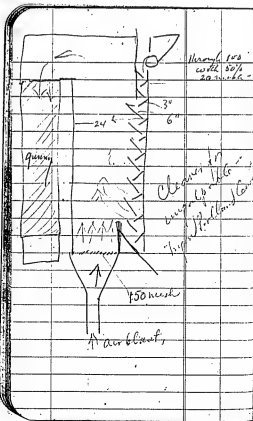
Hale 214-0  
Limestone contact - across  
RR from graveyard in gully

Hales at Handshand

234 235 236 237 262  
263

$$\begin{array}{r}
 175 \\
 30 \\
 \hline
 9 \overline{) 5250} \\
 \underline{5641} \\
 5270 \quad 56410
 \end{array}$$

$$\begin{array}{r}
 564 \\
 260 \\
 \hline
 3384 \\
 11280 \\
 \hline
 60 \overline{) 14664} \\
 \underline{12000} \\
 2664 \\
 \underline{2400} \\
 264
 \end{array}$$



Washers in 1/16"

Roof blower on each engine  
 shaft delivery air at 3 or 4  
 lbs through 3 or 4" pipe to  
 enclosed box containing all  
 motors -

packing in dust guard rolls  
 must have screen plate so no  
 oil passes through waste as  
 want heavy feed oil and  
 36 Roll 25 Hp 1 to 10 12 1/2 15 20

Diamond Drill Hole 1									
No 2 Hole									
Box	Sec	S <sub>1</sub>	act F <sub>2</sub>	C <sub>2</sub> O	Box	Sec			
Box 1	Sec 1	22.04	10.15	60.15	Box 6	Sec 1	33.90	11.94	48.21
"	2	19.32	8.99	65.82	"	2	35.95	11.28	45.91
"	3	19.51	9.08	65.71	"	3	31.39	10.48	51.50
"	4	23.65	10.69	59.86	"	4	24.32	10.68	60.96
Box 2	Sec 1	20.29	8.96	65.99	Box 7	Sec 1	20.96	11.06	64.94
"	2	19.98	9.22	65.28	"	2	17.97	8.27	67.63
"	3	21.10	9.61	63.31	"	3	24.91	8.40	61.46
"	4	18.15	7.86	67.86	"	4	35.07	11.60	45.78
Box 3	Sec 1	21.39	10.97	62.12	Box 8	Sec 1	35.67	11.00	50.53
"	2	21.18	10.49	61.93	"	2	27.85	9.27	60.47
"	3	22.27	10.97	60.58	"	3	24.97	9.45	59.80
"	4	21.48	10.76	64.28	"	4	21.90	9.28	65.61
Box 4	Sec 1	19.58	10.96	65.61	Box 9	Sec 1	22.61	7.09	62.32
"	2	21.32	10.38	62.65	"	2	23.08	12.90	59.85
"	3	21.12	10.61	63.03	"	3	19.90	10.12	66.06
"	4	22.81	10.60	64.03	"	4			
Box 5	Sec 1	18.78	8.66	66.07	3.74				
"	2	24.99	8.92	62.80					
"	3	26.56	10.25	59.20					
"	4	23.14	10.00	61.06					

Dolomite from CV side of hole 204

Si	al	Fe	Ca	Mg
3.90	1.03	.65	60.69	32.86

204 1 to 5 ft from Dolomite

Si	al	Fe	Ca	Mg
2.90	2.32	3.87	89.12	1.57

204 6 to 7 ft from Dolomite

Si	al	Fe	Ca	Mg
2.05	.93	1.15	94.39	1.48

112 1 to 5 ft from Galloway

Si	al	Fe	Ca	Mg
7.86	4.14	1.39	83.45	1.05

112 6 to 10 ft from Galloway

Si	al	Fe	Ca	Mg
7.71	4.71	1.39	82.30	2.32



Vulcanite  
Ca Si Al<sub>2</sub>O<sub>3</sub> Fe Mg

68.77 17.46 8.90 2.95

Drill hole ND1 -

23 to 44 - 4 assay samples  
from bags -

	Si	Al	Fe	Ca	Mg
1	28.10	10.62	3.15	52.16	2.70
2	20.62	6.83	3.12	65.64	2.72
3	19.80	6.83	1.99	66.32	3.04
4	18.78	6.89	1.71	68.53	2.94

Fe

3.31  
3.48  
2.30  
2.38  
2.13  
2.13  
2.30  
2.13

	Si	Al	Fe	Ca	Mg
1	29.10	12.75	52.90		
2	29.10	12.88	52.65		
3	21.30	7.85	66.39		
4	20.95	7.95	64.95		
5	20.50	7.83	66.69		
6	20.70	7.60	67.06		
7	19.83	8.15	67.12		
8	19.21	10.65	66.21		

La Al Fe Si Mg					Total: Si Al Fe Ca Mg					
44 to 48	63.68	6.20	2.72	19.96	3.66	9.57	19.67	7.49	2.21	64.18
48 to 50	64.94	5.81	2.38	20.97	3.44	8.29	21.13	6.61	2.21	65.20
50 to 55	68.05	6.08	2.00	18.57	2.69	8.98	18.28	5.85	2.30	68.81
55 to 62	68.44	6.02	2.08	18.47	3.18	8.10	17.99	6.41	2.21	69.17
62 to 66	62.75	6.56	3.10	21.78	3.36		21.70	7.99	2.47	69.86
66 to 70	67.49	6.53	2.30	18.22	3.29		18.22	7.62	2.38	67.62
70 to 77	67.57	6.19	2.00	18.56	3.31	8.99	18.07	7.18	2.13	68.12
77 to 84	68.21	6.00	2.34	17.36	3.50	8.93	17.67	7.30	1.79	68.43
84 to 93	69.92	7.35	1.53	16.74	1.26		16.63	7.30	1.28	70.24
93 to 97	67.62	6.38	2.17	18.61	3.59		18.10	6.99	2.38	67.56
97 to 102							15.82	6.26	1.99	70.73
102 to 116							16.80	6.03	1.92	69.76
116 to 121	73.76	5.75	1.26	14.74	3.32					
121 to 127	71.03	5.95	1.30	16.82	3.38					
137 to 148	67.19		8.10	1.9	11.49					
148 to 161	70.22	7.77		17.3	3.99					
161 to 167	68.80	7.60		17.57	4.75					
167 to 171	68.98	6.88		17.84	5.04					
127 to 130	78.47	7.6	1.19	12.38	3.24					
130 to 137	73.39	5.71	1.30	14.70	3.25					

Limestone Calant Contact  
E side

		Ca	Si	Al	Fe	Mg
✓ 96	1 to 5	91.27	2.28	1.49	.80	1.57 96
✓ 99.4	6 to 10	94.33	1.70	.70	.73	1.93 99.4
✓ 96.55	11 to 15	91.1	1.81	1.77	.57	1.40
✓ 99.97	16 to 20	94.24	1.17	.26	.57	3.73
✓ 93.46	21 to 25	88.94	1.69	.69	.84	6.30
✓ 96.47	26 to 30	87.99	2.12	3.17	.84	2.65
✓ 98.40	31 to 35	91.62	1.54	1.05	.84	3.65
✓ 100.14	36 to 40	94.52	1.08	.53	1.15	2.76
	41 to 45	96.41	1.55	.28	.92	
100	46 to 50	92.19	3.27	1.15	1.53	1.86
	51 to 55	89.83	4.42	1.91	1.38	
99.96	56 to 60	82.91	9.63	2.95	1.54	2.61
99.99	61 to 65	88.96	5.75	2.35	1.30	1.63
100.00	66 to 70	79.82	11.70	4.24	1.61	2.72
96.39	71 to 75	16.85	10.00	3.63	1.92	3.99
100.00	76 to 80	91.16	3.90	2.30	1.15	1.87
decamp	78 to 82					
		89.5	3.38	1.78		
						69% lime available

112 - only 1/2  
 black pieces large (most)  
 siliceous stiff decaying  
 (New out)

1 to 5 ft  
 204 - Curious stiff crystalline  
 looks like gypsum but is  
 probably celestine or white  
 hematite

112 16 to 20 ft all decomposed  
 204 - 9 well away it harder

112 6 to 10 ft decomposed  
 but not so bad as above

112 11 to 15 ft from bottom decomposed  
 204 looks like Mass Ca  
 undecomposed -

204 11 to 14 ft from bottom  
 decomposed -

204 6 to 7 ft from Dolomite  
 2 pieces fairly ok one  
 large piece damp left out -

204 11 to 14 ft from Dolomite

Si	Al	Fe	Ca
535	346	94	9790

112 11 to 15 ft from bottom

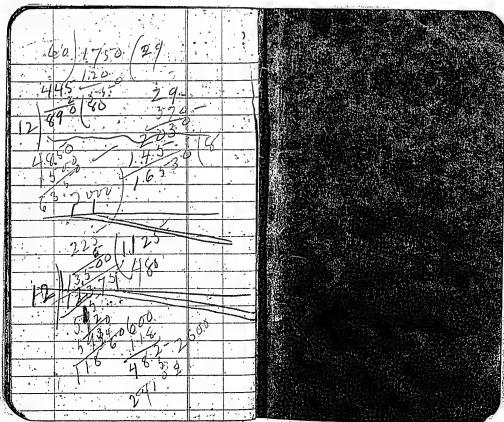
Si	Al	Fe	Ca
1337	567	168	7487

112 16 to 20 ft from bottom

Si	Al	Fe	Ca
2212	926	129	5924

112 29 ft 2" bottom

Si	Al	Fe	Ca
806	391	134	8352



**EDISON PORTLAND CEMENT COMPANY RECORDS**  
**FINANCIAL RECORDS**

These records cover the period 1899-1912 and consist of five general ledger books summarizing transactions relating to the cement works at Stewartville, New Jersey; company offices in Philadelphia and in Camden, New Jersey; and the model of Edison's concrete house at the West Orange laboratory.

Among the items not selected are seven general ledgers (1913-1929); eleven journals (1899-1925); fourteen cash books (1899-1919); eleven cash receipt books (1919-1931); and four cash disbursement books (1920-1931).

#### General Ledger (1899-1903)

This ledger covers the period June 1899-June 1903. As the account book of final entry, it summarizes transactions relating to the cement works at Stewartsville; the company offices in Philadelphia and Camden; and the model of Edison's concrete house at the West Orange laboratory. Included are accounts payable and receivable, sales accounts, and entries pertaining to the quarries, mills, and machinery at Stewartsville. Other accounts relate to experiments, plans, and assays. Numerous entries concern the assessments and payments of individual investors in the company, including Charles A. Coffin, Theron I. Crane, James Gaunt, James Gayley, Harlan Page, William S. Pilling, Willard P. Reid, and Robert H. Thompson. There are also accounts with Edison and with various Edison companies, including the Edison Manufacturing Co., Edison Ore Milling Syndicate, Ltd., Edison Phonograph Works, Edison Storage Battery Co., National Phonograph Co., and New Jersey and Pennsylvania Concentrating Works.

#### General Ledger (1903-1905)

This ledger covers the period July 1903-December 1905. As the account book of final entry, it summarizes transactions relating to the cement works at Stewartsville; the company offices in West Orange, Philadelphia, and Camden; and the model of Edison's concrete house at the West Orange laboratory. Included are accounts concerning sales and warehouse operations; capital, bond, and interest accounts; and a profit and loss statement for the year 1905. Other entries pertain to the quarries, mill buildings, and machinery at the Stewartsville works. There are also accounts with Edison and with various Edison companies, including the Edison Chemical Works, Edison Manufacturing Co., Edison Storage Battery Co., National Phonograph Co., and New Jersey and Pennsylvania Concentrating Works.

#### General Ledger (1906)

This ledger covers the period January-December 1906. As the account book of final entry, it summarizes transactions relating to the cement works at Stewartsville and company offices in Philadelphia and Camden. There are accounts with Edison and various Edison companies, including the Edison Manufacturing Co. and the New Jersey and Pennsylvania Concentrating Works.

#### General Ledger (1906-1909)

This ledger covers the period January 1906-December 1909. As the account book of final entry, it summarizes transactions relating to the cement works at Stewartsville and other company facilities. Included are accounts payable and receivable, bond and interest accounts, payroll accounts, and sales accounts. Also included are profit and loss statements for the period 1906-1909. A few accounts pertain to the use of duck bags in the shipment of cement. Other accounts relate to company offices in Boston, Camden, New York City, Philadelphia, Pittsburgh, and Savannah, as well as storage facilities in New Jersey, New York, and several southern states, including Alabama, Georgia, Florida, North Carolina, and South Carolina. There are also accounts with Edison and various Edison companies, including the Edison Crushing Roll Co. and the Edison Manufacturing Co.

#### General Ledger (1910-1912)

This ledger covers the period January 1910-December 1912. As the account book of final entry, it summarizes transactions relating to the cement works at Stewartville and other company facilities. Included are accounts receivable and payable; stock and bond accounts; payroll and advertising accounts; profit and loss statements; and accounts pertaining to sales, including the sale of fertilizer. A few accounts deal with paper and duck bags used for the shipment of cement. Some entries relate to poultry farming at Stewartville. Others pertain to company sales offices in Boston, Newark, New York City, Philadelphia, Pittsburgh, and Savannah. There are also warehouse accounts for facilities in New Jersey, New York, and several southern states, including Florida, Georgia, North Carolina, and South Carolina. In addition, there are accounts with Edison and various Edison companies, including the Edison Crushing Roll Co. and the Edison Manufacturing Co.



**Edison Portland Cement Company Records  
General Ledger (1899-1903)**

This ledger covers the period June 1899-June 1903. As the account book of final entry, it summarizes transactions relating to the cement works at Stewartsville; the company offices in Philadelphia and Camden; and the model of Edison's concrete house at the West Orange laboratory. Included are accounts payable and receivable, sales accounts, and entries pertaining to the quarries, mills, and machinery at Stewartsville. Other accounts relate to experiments, plans, and assays. Numerous entries concern the assessments and payments of individual investors in the company, including Charles A. Coffin, Theron I. Crane, James Gaunt, James Gayley, Harlan Page, William S. Pilling, Willard P. Reid, and Robert H. Thompson. There are also accounts with Edison and with various Edison companies, including the Edison Manufacturing Co., Edison Ore Milling Syndicate, Ltd., Edison Phonograph Works, Edison Storage Battery Co., National Phonograph Co., and New Jersey and Pennsylvania Concentrating Works. The spine is stamped "Ledger No. 1." The front cover is marked "15." The book contains 473 numbered pages and an index; some pages are blank.

[REDUCTION RATIO = 16:1]

Edison Portland

Leermant Leo

Ledger

1889-1902

- 1551  
1. *Quarries* (stone, brick, quarry, etc. and experiments)
- 1561  
2. *Building* (Building & materials)
- 1571  
3. *Masonry* (Masonry, brick, etc.)
- 1581  
4. *Iron Buildings* (Iron buildings and structures, etc.)
- 1591  
5. *Brick Masonry*
- 1601  
6. *Stone Buildings* (Stone, brick, etc., and experiments)
- 1611  
7. *Building* (Building, etc., and experiments, etc.)
- 1621  
8. *Building* (Building, etc., and experiments, etc.)
- 1631  
9. *Building* (Building, etc., and experiments, etc.)
- 1641  
10. *Building* (Building, etc., and experiments, etc.)
- 1651  
11. *Building* (Building, etc., and experiments, etc.)
- 1661  
12. *Building* (Building, etc., and experiments, etc.)
- 1671  
13. *Building* (Building, etc., and experiments, etc.)
- 1681  
14. *Building* (Building, etc., and experiments, etc.)
- 1691  
15. *Building* (Building, etc., and experiments, etc.)
- 1701  
16. *Building* (Building, etc., and experiments, etc.)
- 1711  
17. *Building* (Building, etc., and experiments, etc.)
- 1721  
18. *Building* (Building, etc., and experiments, etc.)
- 1731  
19. *Building* (Building, etc., and experiments, etc.)
- 1741  
20. *Building* (Building, etc., and experiments, etc.)
- 1751  
21. *Building* (Building, etc., and experiments, etc.)

Herbert J. (Aunt)	123
Allen Edward B	134
Charles W. (Aunt)	135
Ellis Edward P. B. 2d	209
Alfred Arthur Bennett Esq	195
Ellis E. (Aunt) Esq	209
Walter Chapman Esq	189
Amos (Aunt) Esq	141

Assessment, C/P	12
Assessment	214
Assessment, C/P	13

Robert T. (Aunt) S	101
David (Aunt) S	103
Thomas James S	113
Bigelow W. S	30
Robertson W. S	120
Brookland Frank W	133
Bornley Joseph S	133
Robert S. S	153
Buch Daniel Estate	156
Band Daniel	159
Barnes E. Henry	163
Baillie George S	164
Boatman George S. (Aunt)	164
Baker J. P. (Aunt)	166
Brown John Henry	193
Brown Andrew Esq	174

Boyer Sarah W	99
Briggings Jonathan	226
Blower	230
Belle (Aunt)	544-542
Boys	426

		Capital Stock Profund	2
Carrigan J. Hayes	100	Cash	10
Conkle V. B.	109	Charter Expenses	14
Coole Fegan, J.	100	Common Capital Stock	4
Campbell Melrose	109	Contingent Bonds	55
Coltman L. J.	110	Glenn John W.	99
Coffin L. A.	115	Cook, Commutation	99
Carroll Wm L.	115	Glenn John W. Trust	99
Crampton E. J.	123	Cum gratia	222334
Crandford L.	124	Cum gratia Office	52
Cum gratia L. B. & Co. Ltd. by 200		Cum gratia Bonding	232344
Carter W. J. B.	94	Cum gratia Bonding, by	195
Cum gratia Wm L.	125	Cum gratia Bond	464
Cum gratia Rosalie	150	Cum gratia QP	512
Cum gratia B. B. & Co. Ltd. by 25		Cum gratia B.	152

Dickson Samuel	112
Davis George L.	125
De Haven A. B.	131
Dewey E. C. W. D. L.	8
Dickson Wm L.	147
Dickson, Dant E.	149
Donaldson L. L.	52
Darling E. W.	153
Darling, E. C.	154
Dyer Richard W.	163
Darling E. W.	52
Darling E. C. L.	194

Coyne J. L. 112

Cross H. 114

Cullin John P. 117

Ellis, William L. 118

Ellis, Thomas H. 119

Ellis, Charles H. 120

Ellis, Thomas W. 6 21

Ellis, Thomas (M. 11) 15

Ellis, Thomas (M. 12) 22

Ellis, Thomas (M. 13) 40

Ellis, Thomas (M. 14) 56 53

Ellis, Thomas (M. 15) 32

Ellis, Thomas (M. 16) 46 416

Ellis, Thomas (M. 17) 52 550

Ellis, Thomas 216

Ellis, Thomas 3

Ellis, Thomas 14

Ellis, Thomas 109

Ellis, Thomas W. 107

Ellis, Thomas 119

Ellis, Thomas 126

Ellis, Thomas W. 130

Ellis, Thomas 99

Ellis, Thomas 114

Gaylor James	102
Leaskie B. H. H.	113
Goodman S	120
Gumey Wm S	146
Grange William	153
Grange John W	153
Guene James	160
Guene, Thomas D. J	160
Guene, John C.	190
Guene, Robert C.	190 157
Guene, J. H.	154

Grading (No. 2) 70

Henson Lewis B	105
Hobson Thomas	105
Hicks L. H.	115
Hornes W B	115
Hughes Chas S	119
Hugueny Joseph	125
Huangy Alas C	132
Harris Howard L	136
Huff W. A	149
Houston John W	154
Hugate J. H.	164

Embrey 50 177

Embrey and Thomas 29

Emmerson 9 405

Emmerson, Edward 114

Emmerson, J. W. 125

Emmerson, Walter 161



Horns Robert J. W. 121

Hunkel C. W. 165

Hunsley Archd W. 190

Lippin Dr W. 150

Lippman Wm Dr 157

Lathrop C. W. 157

Lewis Wm G. L. 157

Maack John Dr 120

Meyer E 121

Mansfield John W 137

Mathews John P 138

Muller Alfred L 138

Mason, E. L. Co. 143 172

Mayer Richard 146

Martin David 147

Muller F. Blum 156

Maz Jones 166

Marglow Fred Co 193

Morris Henry & Sons, Omaha 194 186

Morris White, Co. 192

Mallory W. H. Kustner 7

Morse Building (71) 34

Mill Administration (M14) 60 322 440

Mill Buildings (M. 4) 7 P 350

Mill Machinery (M. 5) 93 374 394

Moore 206

Masonry 196 318

McCarthy John 120

McFarland James P 145

McHale Anthony H 157 173

McKinney Daniel Co 165

West George) B 116

Westward Henry) B 52

Westward Bird) B 100

Westward Sea) B 161

Westward South) B 162

Westward North) B 162

Westward Bird) B 162

Westward Sea) B 164

Westward Sea) B 168

N. E. Coast - 50

Westward Sea) B 111

Coast) B 24-56

Coast) B 46

Coast) B 172

Page) Harlan 111 160

Pilling W.S. 127

Potts W. & Son H. 97

Reed Samuel W. 139

Shannon John L. 215

Shaw John, Thomas 144

Shaw J. & Son W. 145

Shilling & Son 151 159 144

Simons John D. 156

Smith, David 165

Smith, L. E. 165

Smith, John L. 172

Proprietor, Baptist Church 2

Patentee 5

Reed David 95

Reed John & Son 98

Reed, John 90 404

Reed, John 201 412

Reed 204 258

Reed 214

Reed & Son 16

Reed & Son, L. E. 52

Reed & Son, L. E. 194

Reed & Son, L. E. 115

Cross Camp, E	104
Hattery M B	122
Cross E, E	126
Logans Church S	131
Chadman's E, E	139
Chadman's E, E	140
Chadman's E, E	143
Chadman's E, E	150-170
Chadman's E, E	158
Chadman's E, E	192
Chadman's E, E	191
Chadman's E, E	189
Chadman's E, E	185

Chadman's E, E	33
Chadman's E, E	54-525
Chadman's E, E	225
Chadman's E, E	210-975

Schnitz, Ransom S	100
Schnitz, Ransom S	110
Schnitz, Ransom S	101
Schnitz, Ransom S	117, 170
Schnitz, Ransom S	122
Schnitz, Ransom S	124
Schnitz, Ransom S	39
Schnitz, Ransom S	129
Schnitz, Ransom S	129
Schnitz, Ransom S	134
Schnitz, Ransom S	140
Schnitz, Ransom S	141
Schnitz, Ransom S	144
Schnitz, Ransom S	152
Schnitz, Ransom S	152
Schnitz, Ransom S	157
Schnitz, Ransom S	163

Stone, Elizabeth	94
Stone, Edward	74, 240, 250
Stone, Edward	46
Stone, Edward	86, 460
Stone, Edward	225
Stone, Edward	236
Stone, Edward	312
Stone, Edward	422
Stone, Edward	175
Stone, Edward	194

Thomas J. Lewis	103	Jace	470
Townsend Henry E	106		
Townsend R. & J.	107		
Thompson J. W.	104		
Thorp Joseph C	127		
Townsend F. W.	125		
Thompson John W.	141 145		
Thompson John S.	157 171		
Thompson & Howard	161		
Thompson J. Linton	166		

Urie S. C.	105	Underwriting Commission	3
Upton H. W.	156		

Van Breda Henry 100

Vatson Louis Woods Esq 99

Villemotte (the name) Leming Esq 200

Wood Andrew Esq 102

Walker James W 110 144

Wells Henderson Esq 98

Wells James B 132

White Henry 142

Whitcomb Lewis Esq 142

Wideman William J 155

Warren Charles 159

Wheeler Henry Esq 194

Whitely Lawrence Esq 191

Whitely Mary Esq 191

Young L. D.

154

Young & Railway (72.10) 66 250

Young N. T. Barker

163





Common Capital Stock

1905.	June 30	2	Balance to L	2900000	-	1199	June 30	2	Balance to L (Edmond)	5900000
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Patents.

1999 June	30	To the W. Column	3 900000	-	1999 June	30	By Balance f. L	3 900000	-
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Thomas A. Edison Grand vs

1899	June	30	Edmund Wolfe	5 900000 -	1899	July	30	Edmund Wolfe	5 900000 -
July	1	3	Edmund Wolfe	10 09 99	Aug	12	3	Edmund Wolfe	170 99 99
Aug	24	Edmund Wolfe	20 330						
			600						
July	7	3	Edmund Wolfe	34 5 10 7	Aug	23	3	Edmund Wolfe	56 552 50
July	11	3	Edmund Wolfe	40 5 17 26	Aug	27	3	Edmund Wolfe	58 115 00
Aug	20	3	Edmund Wolfe	47 5 22 35	Aug	27	3	Edmund Wolfe	56 5 54 99
Aug	31	3	Edmund Wolfe	55 11 55 00	Aug	28	3	Edmund Wolfe	52 5 52 00
Aug	16	3	Edmund Wolfe	57 5 70 50	Aug	28	3	Edmund Wolfe	54 23 50
Aug	15	3	Edmund Wolfe	57 5 54 50	Aug	7	3	Edmund Wolfe	54 5 50 00
Aug	15	3	Edmund Wolfe	57 5 54 50	Aug	31	3	Edmund Wolfe	56 5 25 50
Aug	15	3	Edmund Wolfe	57 5 54 50	Aug	31	3	Edmund Wolfe	56 5 25 50
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Aug	15	3	Edmund Wolfe	57 5 54 50	Aug	31	3	Edmund Wolfe	56 5 25 50
Aug	15	3	Edmund Wolfe	57 5 54 50	Aug	31	3	Edmund Wolfe	56 5 25 50
Aug	15	3	Edmund Wolfe	57 5 54 50	Aug	31	3	Edmund Wolfe	

W. S. Mallory Vice Presy Orange & O

[illegible]

## Edison Phonograph Works Chicago N.Y.

1900	1	3	Chatterbox	15	365	1900	5	Chatterbox	26	443
1900	5	1	band	163	497					443
					443					443
1900	7	3	band	34	1542	1901	9	band	23	334
			Chatterbox	35	1536					334
					334					334
1901	20	3	band	47	2268	1901	24	band	26	2268
1901	15	1	band	59	1200	1901	12	band	15	1200
1901	24	3	band	5	1512	1901	24	band	97	1483
					1512					2967
					1512					1512
1901	24	3	band	27	1700	1901	24	band	29	1662
					1700					1662
					1700					1662
1901	22	3	band	120	336	1901	24	band	72	1700
1901	24	3	band	11	1750	1901	24	band	104	554
1901	6	1	band	3	11000	1901	24	band	154	713
1901	24	3	band	4	1150	1901	24	band	154	597
1901	24	3	band	4	1150	1901	24	band	154	597
					1150					597
					1150					597
1901	11	3	band	17	1240	1901	10	band	14	1240
1901	24	3	band	19	2075	1901	24	band	29	2075
					2075					2075
1901	24	3	band	25	990	1901	24	band	155	990

## Insurance

1900	19	3	band	57	572	1901	13	band	46	572
1900	1	1	band	65	529	1901	4	band	112	500
					529					500
					529					500
1901	18	1	band	49	554	1901	23	band	100	1075
1901	23	1	band	105	227	1901	20	band	152	100
					227					100
					227					100
1901	24	1	band	112	500	1901	31	band	150	270
					500					270
					500					270
1901	24	1	band	124	900	1901	10	band	150	1000
					900					1000
					900					1000
1901	24	1	band	137	100	1901	11	band	100	1000
					100					1000
					100					1000
1901	16	1	band	147	1150	1901	9	band	200	1000
					1150					1000
					1150					1000
1901	20	1	band	155	2700	1901	17	band	222	100
					2700					100
					2700					100
1901	1	1	band	159	1800	1901	20	band	242	100
					1800					100
					1800					100
1901	18	1	band	167	270	1901	27	band	244	500
					270					500
					270					500
1901	10	1	band	169	100	1901	18	band	242	100
					100					100
					100					100
1901	7	1	band	174	770	1901	12	band	322	100
					770					100
					770					100
1901	11	1	band	175	1200	1901	3	band	344	100
					1200					100
					1200					100
1901	6	1	band	207	1500	1901	20	band	350	100
					1500					100
					1500					100
1901	6	1	band	209	1000	1901	16	band	361	100
					1000					100
					1000					100
1901	9	1	band	225	1500	1901	16	band	361	100
					1500					100
					1500					100
1901	10	1	band	227	100	1901	16	band	361	100
					100					100
					100					100
1901	20	1	band	244	1500	1901	24	band	361	100
					1500					100
					1500					100
1901	27	1	band	245	500	1901	3	band	361	100
					500					100
					500					100
1901	10	1	band	255	1970	1901	11	band	404	100
					1970					100
					1970					100
1901	15	1	band	257	2500	1901	10	band	404	100
					2500					100
					2500					100
1901	16	1	band	263	500	1901	10	band	404	100
					500					100
					500					100
1901	17	1	band	268	5250	1901	10	band	404	100
					5250					100
					5250					100
1901	3	1	band	303	14363	1901	10	band	404	100
					14363					100
					14363					100
1901	3	1	band	321	1362	1901	10	band	404	100
					1362					100
					1362					100
1901	8	1	band	323	1000	1901	10	band	404	100
					1000					100
					1000					100
1901	1	1	band	325	2500	1901	10	band	404	100
					2500					100
					2500					100
1901	12	1	band	325	150	1901	10	band	404	100
					150					100
					150					100
1901	3	1	band	349	4115	1901	10	band	404	100
					4115					100
					4115					100
1901	4	1	band	371	2950	1901	10	band	404	100
					2950					100
					2950					100
1901	20	1	band	371	100	1901	10	band	404	100
					100					100
					100					100
1901	9	1	band	371	100	1901	10	band	404	100
					100					100
					100					100
1901	14	1	band	371	100	1901	10	band	404	100
					100					100
					100					100
1901	11	1	band	371	4229	1901	10	band	404	100
					4229					100
					4229					100
1901	15	1	band	371	5000	1901	10	band	404	100
					5000					100
					5000					100
1901	3	1	band	371	500	1901	10	band	404	100
					500					100
					500					100











## Philadelphia Office

1891	1	By Andrews	174	62.50	9000	1940940
	30	bal	445	62.50		
				62.50		
				9000		
Dec	4		349	41.67		
	30		359	62.50		
				62.50		
				9000		
1892	3		361	41.67		
Jan	31		355	62.50		
				62.50		
				9000		
Feb	3		319	41.67		
	27		343	62.50		
				62.50		
				9000		
Mar	3		345	41.67		
				62.50		
1892			930464		930464	
Apr	1	By Bannum	1	62.50	1940940	55
	2	bal	1	62.50		
				62.50		
				9000		
			2	41.67		
		J. McDonald	15	200.00		
	10	bal	14	150.00		
	30		14	62.50		
			14	62.50		
			14	9000		
May	1		15	9000		
June	3		21	41.67		
	7			62.50		
				62.50		
				9000		
	15		24	50.00		
	30		25	9000		
July	1		26	41.67		
	12		27	62.50		
				62.50		
				9000		
Aug	5		34	62.50		
				9000		
				41.67		
	11		39	100.00		
Sept	19		40	62.50		
				62.50		
			42	100.00		
				41.67		
			10940	55		

## Philadelphia Office

1891	2	By Bannum	154	4940	55	1940940
	22	bal	414	9000		
	3		50	41.67		
	7	By Bannum	113	439.09		
	24	bal	41	62.50		
				62.50		
				9000		
				9000		
Dec	3		55	116.25		
	13		57	9000		
1892	3		61	41.67		
Jan	3		66	41.67		
	7			125.00		
				125.00		
				100.00		
	16		69	500		
				124.25		
Mar	3		73	41.67		
	10		74	9000		
Apr	7		76	125.00		
	10		77	62.50		
				62.50		
				9000		
May	6		82	41.67		
June	1		87	41.67		
	9			125.00		
				125.00		
				100.00		
	12		90	500		
				13435.75		

13435.75

Thomas W. Edson

1893	By	Baran	21	1449.55	1893	By	Baran	30	1452066.27
29	Baran		15	6305.97	30	Baran		150	3397.12
				1459.50	9	Baran		171	5214.03
				2500.00				181	12426.67
				5061.00				181	231.02
				15203.70				181	12960.00
				16343.52				181	5000.00
				4632.00				181	9217.75
				2500.00				181	1450.00
				10046.00				181	2250.00
				10242.40				181	962.50
				4621.50				181	901000.00
				14616.25				181	1500.00
				5145.00				181	5000.00
				11025.00				181	5000.00
				5133.33				181	5000.00
				2910.22				181	5000.00
				75659.59				181	5000.00

75659.59

Thomas W. Edson

Baran

1893	By	Baran	20	1452066.27	1893	By	Baran	20	1452066.27
15	Baran		15	6305.97	20	Baran		150	3397.12
29	Baran		9	1459.50	31	Baran		171	5214.03
				2500.00				181	12426.67
				5061.00				181	231.02
				15203.70				181	12960.00
				16343.52				181	5000.00
				4632.00				181	9217.75
				2500.00				181	1450.00
				10046.00				181	2250.00
				10242.40				181	962.50
				4621.50				181	901000.00
				14616.25				181	1500.00
				5145.00				181	5000.00
				11025.00				181	5000.00
				5133.33				181	5000.00
				2910.22				181	5000.00
				75659.59				181	5000.00

257794.59

## Expense (Orange Office) No 13

1999	10	2	land	5	204.53	1999	12	9	St. Louis, Mo.	9	32.50
1999	12			5	30.40	1999	5	5	Bureau	14	3907.47
				5	3.43						
	14			5	27.45						
				5	94.02						
				5	5.70						
				5	30.67						
	17			5	1.94						
	20			5	26.00						
				7	5.60						
	26			7	3.14						
	29			7	6.59						
				7	2.65						
Aug 2				9	416.66						
11				9	47.97						
				9	6.00						
30				11	44.00						
				11	416.66						
Sept 19				12	116.19						
30				15	416.66						
Oct 5				17	111.44						
16					44.00						
23					22.00						
25					33.62						
30				19	22.00						
31					416.66						
Nov 1				21	41						
21					46.00						
					23.00						
28					29.00						
29					416.66						
Dec 5				23	27.00						
					50.94						
9					55.83						
13					27.00						
16					104.27						
20					15.00						
26				25	13.42						
30					4.50						
					4.50						
					416.66						
					12.00						
1900	5			27	75.00						
					12.00						
					3949.97						

3949.97

## Expense (Orange Office) No 13

1999	5	2	Bureau	3947.47	1999	12	9	land	455	2.52
1999	5	5	land	27. 104.57	1999	31	5	Bureau	24	6419.24
	11			27. 1.42						
				53.70						
				75						
	12			29. 14.00						
	23			14.00						
				14.00						
	26			4.05						
				5.02						
				11.05						
				9.65						
	31			31. 416.66						
Feb 1				33. 23.34						
5				75.00						
8				27.00						
14				35. 27.00						
20				31.61						
				5.00						
				37. 22.14						
				114.75						
				27.00						
21				41. 416.66						
24				42. 65.19						
2				27.00						
				75.00						
7				127						
8				27.00						
9				60						
15				45. 27.00						
				47. 22.44						
16				42.0						
19				49. 17.44						
				194						
22				27.00						
24				51. 32.00						
29				75.00						
30				416.66						
31				11. 25.20						
				6421.76						

6421.76

## Expenses (Orange Office)

1950	April	3	Balance	23	6419.25	1950	Apr	24	of 10.00	15	10.41
			of 10.00	13	290.21		June	1	haul	24	48.50
		11	haul	53	40.85		29	Balance	25	4477.27	
					64.52						
					51.53						
					2.49						
					54.64						
		12			6.10						
					2.70						
		16		57	56.35						
		19			24.50						
				59	6.90						
					57.44						
		26		63	4.46						
					47.44						
		30			416.66						
May		1		65	75.00						
		2			47.29						
		8		67	50.55						
		11			7.40						
					59						
				69	55.75						
		17		71	7.94						
					7.04						
					74.46						
		18		73	53.29						
		23		77	55.27						
		24	of 10.00	14	74.85						
		29	haul	41	47.29						
		31			75.00						
		4			416.66						
June		7			47.29						
				15	59						
		17			47.59						
		18		19	1.00						
					42.77						
		16		91	5.05						
					1.50						
		21	of 10.00	16	63.17						
			haul	73	7.13						
					6.40						
				95	40.44						
					60						
		29		77	45.63						
					497.50						

497.50

## Expenses (Orange Office)

1950	June	29	In Balance	27	4477.27	1950	June	26	of 10.00	26	1175.57
		30	haul	77	416.66						
					75.00						
July		6		101	45.34						
		12		103	40.54						
		13			50						
		16			2.60						
				105	159.00						
		20			40.54						
		26		107	40.54						
		31		109	768.12						
				109	117.75						
				109	41.29						
				111	416.66						
Aug		1		113	102.69						
					75.00						
		5			41.14						
		9		115	142						
					4.41						
					11.51						
					159.20						
		7		117	41.14						
		22		119	64.43						
					40.54						
		30		123	75.00						
					416.66						
		31			44.64						
				125	64.79						
					2.10						
					70.22						
					5.00						
				127	132						
					170						
					6.70						
					75						
					1.50						
				131	1.90						
					46.57						
Sept		6		133	40.54						
		12			25.13						
				135	10.31						
					50						
		14			44.64						
		24		137	44.64						
					1175.57						

1175.57

## Orange Office Expenses

1900 Dec	26	27	1900 Dec 31	of Balance	1900 Dec 31	1900 Dec 31
Exp	26	27	254757.27		1900	1900
			191. 4.197			
	29		145. 4.266			
Ord	4		145. 75.00			
			75.59			
	10		145. 106.65			
			22.66			
			26.50			
	12		147. 13.00			
			4.50			
			149. 1.50			
			147.3			
	19		151. 56.71			
	20		152. 18.59			
			9.191			
	30		159. 3.264			
			340.4			
	31		416.66			
Am	2		161. 13.265			
			75.00			
	5		163. 17.1			
			50			
			142.5			
	6		164. 34.64			
	7		165. 6.32			
	8		167. 4.45			
			180			
			516			
			420			
	7		169. 7.94			
	22		171. 10.59			
	24		171. 34.64			
			340.4			
	30		173. 416.26			
			75.00			
			347.1			
Dec	1		175. 23.30			
	4		177. 16.920			
	10		174. 34.64			
			34.64			
	27		178. 34.04			
	29		185. 75.00			
	31		416.66			
			150			
			14747.26			

14747.66

## Orange Office Expenses

1900 Dec	31	32	1900 Dec 31	of Balance	1900 Dec 31	1900 Dec 31
Exp	31	32	26 14747.66		1900	1900
			145. 5.50			
	9		191. 147.51			
			34.04			
	10		193. 53.63			
			1.00			
	11		195. 26			
	16		40.66			
	17		3.16			
			197. 173.24			
	20		199. 22.47			
			49.40			
			54.64			
	31		203. 152.1.13			
			54.47			
			205. 59.09			
			75.00			
			416.66			
Feb	6		209. 157.46.61			
			57.6			
	14		211. 34.79			
	14		213. 26.26			
	15		3.00			
			119.6			
	21		215. 34.14			
			34.49			
	26		217. 154.39			
			144.31			
	27		219. 74			
			219. 416.66			
March	1		221. 16.55.55			
	6		54.69			
			53.71			
	9		225. 8.59			
	21		229. 53.79			
			52.00			
	27		231. 167.4.34			
	30		235. 75.00			
			416.66			
April	2		237. 17.50.67			
			53.67			
			54.50			
	6		239. 34.43			
	12		31.62			
			9.01			
			1.09			
	17		241. 51.60			
			1746.11			

1746.11

## Orange Office

1911	Aug 3	any for	27	17454.11	1911	Aug 12	any for	500	20496.10
		bank	241	54.50					
	25		443	60.63					
	26			50					
				200					
			445	249					
	29		247	190.36					
	30		249	75.00					
			254	416.66					
Aug	10		255	25.70					
			27	2.14					
			27	3.96					
			27	40.96					
	11			7.50					
				59.00					
	17		27	777					
				184					
	24			1512					
			28	13074					
	27			59.00					
			263	64.50					
	30			1.31					
				75.00					
June	7		255	416.66					
				57.51					
	17		267	63.01					
				7473					
				108.42					
	19		269	54.50					
	20			9.63					
	22		275	2.61					
				99.14					
				54.50					
	25		275	453					
				114					
	27			54.50					
July	7		277	416.66					
				75.00					
	10		279	184					
				95					
	11		281	54.50					
				54.50					
	12			9.61					
				20496.10					

376

20496.10

## Internal Revenue Stamp

1911	Aug 24	any for	11	4500.00	1911	Aug 25	any for	10	4500
		bank	13	16500			any for	25	7.50
	2		17	60000			any for	53	29.20
	3		21	5000					
	1		29	6670					
	23			5441.70					
1911	April 1	30 Balance		5379.20	1911	April 30	30 Balance		5441.70
									6010.70
	24	any for	107	100.00					
	11		177	5441.70					
	3		249	100.00					
	25		277	6.50					
	26		341	525.50					
	27		471	500.00					
				6010.70					6010.70
1911	April 1	30 Balance		6010.70	1911	April 30	30 Balance	47	6010.70

## Interest

1899 Aug	21	2	bad	11	347	1900 Aug	2	2	bad	11	3655.41
	27			11	270	1900 Aug	2	2	bad	11	10500
	29			11	270						
	31			11	27						
Sept	1			12	2500						
	14			13	280						
	20			13	570						
	27			13	100						
1900 Aug	31		Balance		5716.39						
					5760.21						
1900 Aug	21	2	Charles	13	295.95	1900 Aug	1	2	Balance		5716.39
	25			13	145.62	1900 Aug	1	2	bad		1001 5700.64
	29		Am. Trust Co.	14	221.92	1900 Aug	25				1547 792.16
	31		Relay Ground	14	247.92	1900 Aug	25				401 116.59
			Balance		9377.12	1900 Aug	30				222 1402.02
					10244.56	1900 Aug	30				372 1464.31
1900 Sept	1	2	J. B. Smith & Co.	15	190.62	1900 Aug	31				372 1464.31
	2		Am. Trust Co.	15	48.43	1900 Aug	31				372 1464.31
	4		M. H. Smith & Co.	15	214.51	1900 Aug	31				372 1464.31
	9		Relay Ground	15	500.00	1900 Aug	31				372 1464.31
	14		J. B. Smith & Co.	17	45.57	1900 Aug	31				372 1464.31
	16		Am. Trust Co.	17	150.77	1900 Aug	31				372 1464.31
	24		M. H. Smith & Co.	18	125.00	1900 Aug	31				372 1464.31
	25		Relay Ground	18	60.42	1900 Aug	31				372 1464.31
	27		J. B. Smith & Co.	18	63.54	1900 Aug	31				372 1464.31
	29		Am. Trust Co.	18	204.33	1900 Aug	31				372 1464.31
1900 Sept	1		Am. Trust Co.	19	250.00	1900 Aug	31				372 1464.31
	16		M. H. Smith & Co.	20	252.00	1900 Aug	31				372 1464.31
	17		Am. Trust Co.	20	51.14	1900 Aug	31				372 1464.31
	20		J. B. Smith & Co.	21	250.00	1900 Aug	31				372 1464.31
	21		Relay Ground	21	24.19	1900 Aug	31				372 1464.31
	22		Am. Trust Co.	21	277.79	1900 Aug	31				372 1464.31
	29		Am. Trust Co.	22	21.94	1900 Aug	31				372 1464.31
	30		Am. Trust Co.	22	20.14	1900 Aug	31				372 1464.31
	31		Am. Trust Co.	22	51.13	1900 Aug	31				372 1464.31
1900 Sept	7		J. B. Smith & Co.	23	241.67	1900 Aug	31				372 1464.31
	24		Am. Trust Co.	23	21.66	1900 Aug	31				372 1464.31
	25		M. H. Smith & Co.	23	246.09	1900 Aug	31				372 1464.31
	26		Relay Ground	23	151.26	1900 Aug	31				372 1464.31
	27		M. H. Smith & Co.	24	250.00	1900 Aug	31				372 1464.31
	28		Am. Trust Co.	24	54.06	1900 Aug	31				372 1464.31
	30		Balance	24	29.67	1900 Aug	31				372 1464.31
					5000.00	1900 Aug	31				372 1464.31
					9450.00	1900 Aug	31				372 1464.31

## Interest

1900 Sept	3	3	Am. Trust Co.	24	25.73	1900 Sept	1	2	Balance	28	5114.50
	23		Am. Trust Co.	24	169.77	1900 Sept	17	2	Charles	28	5114.50
	17		Am. Trust Co.	24	35.14	1900 Sept	33		bad	28	5114.50
	24		Relay Ground	24	25.33	1900 Sept	33			28	5114.50
	31		Am. Trust Co.	24	25.33	1900 Sept	33			28	5114.50
1900 Sept	1		Am. Trust Co.	24	76.66	1900 Sept	33			28	5114.50
	4		Relay Ground	24	78.36	1900 Sept	33			28	5114.50
	6		Am. Trust Co.	24	29.69	1900 Sept	33			28	5114.50
	7		Am. Trust Co.	24	50.43	1900 Sept	33			28	5114.50
	14		M. H. Smith & Co.	24	109.17	1900 Sept	33			28	5114.50
	15		Relay Ground	24	102.50	1900 Sept	33			28	5114.50
	16		Am. Trust Co.	24	117.26	1900 Sept	33			28	5114.50
	20		M. H. Smith & Co.	24	151.25	1900 Sept	33			28	5114.50
	21		Am. Trust Co.	24	31.65	1900 Sept	33			28	5114.50
	24		M. H. Smith & Co.	24	100.00	1900 Sept	33			28	5114.50
	25		M. H. Smith & Co.	24	25.51	1900 Sept	33			28	5114.50
	27		Am. Trust Co.	24	102.00	1900 Sept	33			28	5114.50
1900 Sept	1		M. H. Smith & Co.	24	354.80	1900 Sept	33			28	5114.50
	1		J. B. Smith & Co.	24	207.00	1900 Sept	33			28	5114.50
	6		Am. Trust Co.	24	109.40	1900 Sept	33			28	5114.50
	11		Am. Trust Co.	24	55.40	1900 Sept	33			28	5114.50
	16		J. B. Smith & Co.	24	105.00	1900 Sept	33			28	5114.50
	17		Am. Trust Co.	24	207.00	1900 Sept	33			28	5114.50
	22		Am. Trust Co.	24	11.42	1900 Sept	33			28	5114.50
	24		Am. Trust Co.	24	25.09	1900 Sept	33			28	5114.50
	27		J. B. Smith & Co.	24	122.60	1900 Sept	33			28	5114.50
	29		Am. Trust Co.	24	596.30	1900 Sept	33			28	5114.50
1900 Sept	2		M. H. Smith & Co.	24	675.00	1900 Sept	33			28	5114.50
	2		Am. Trust Co.	24	9.73	1900 Sept	33			28	5114.50
	15		M. H. Smith & Co.	24	109.17	1900 Sept	33			28	5114.50
	16		Am. Trust Co.	24	144.16	1900 Sept	33			28	5114.50
	21		M. H. Smith & Co.	24	254.54	1900 Sept	33			28	5114.50
	21		Am. Trust Co.	24	16.90	1900 Sept	33			28	5114.50
	27		Relay Ground	24	154.33	1900 Sept	33			28	5114.50
	27		Am. Trust Co.	24	37.12	1900 Sept	33			28	5114.50
	29		Am. Trust Co.	24	19.61	1900 Sept	33			28	5114.50
	30		Am. Trust Co.	24	160.00	1900 Sept	33			28	5114.50
	30		Am. Trust Co.	24	175.45	1900 Sept	33			28	5114.50
	31		Am. Trust Co.	24	202.00	1900 Sept	33			28	5114.50
	31		Am. Trust Co.	24	0.00	1900 Sept	33			28	5114.50
	31		Am. Trust Co.	24	70.79	1900 Sept	33			28	5114.50
	31		Am. Trust Co.	24	257.12	1900 Sept	33			28	5114.50
	31		Am. Trust Co.	24	38.19	1900 Sept	33			28	5114.50
	31		Am. Trust Co.	24	17.99	1900 Sept	33			28	5114.50







## Explorations 7614

1899	13	By bank	5	576.94	1899	13	By bank	57	13055.19
July	14	"	"	1752.4					
"	"	"	"	514.05					
"	"	"	"	304.59					
"	"	"	"	391.98					
Aug	11	"	"	9	819.17				
"	14	"	"	9	20.00				
"	16	"	"	9	129.39				
"	"	"	"	9	20.42				
"	"	"	"	9	40.72				
Sept	6	"	"	13	20.29				
"	"	"	"	13	344.21				
"	19	"	"	13	35.57				
"	"	"	"	13	531.65				
"	23	"	"	13	534.63				
"	"	"	"	13	101.09				
Oct	4	"	"	17	359.79				
"	"	"	"	17	42.00				
"	"	"	"	17	01.02				
"	7	"	"	17	549.25				
"	16	"	"	17	441.34				
"	23	"	"	17	325.53				
"	27	"	"	17	325.16				
"	"	"	"	17	124.00				
"	"	"	"	17	144.71				
"	"	"	"	17	49.00				
"	25	"	"	17	76.21				
"	31	"	"	19	3.04				
Nov	2	"	"	21	50.00				
"	6	"	"	"	346.75				
"	8	"	"	"	204.74				
"	"	"	"	"	405.40				
"	"	"	"	"	1046.15				
"	"	"	"	"	46				
"	16	"	"	"	176.66				
"	21	"	"	21	1154.44				
Dec	1	"	"	23	105.49				
"	"	"	"	"	13.62				
"	2	"	"	"	111.40				
"	"	"	"	"	125.00				
"	5	"	"	"	174.50				
"	12	"	"	"	216.65				
"	14	"	"	"	160.00				
"	"	"	"	"	503.59				
				13055.19					13055.19

## Explorations 7614

1899	13	By bank	13055.19	1899	13	By bank	24	170.40
July	14	"	9.41	July	14	"	53	170.12
"	"	"	62.19	"	"	"		
"	"	"	14.50	"	"	"		
"	"	"	56.50	"	"	"		
"	"	"	329.70	"	"	"		
"	"	"	410.2	"	"	"		
"	"	"	427.55	"	"	"		
"	"	"	1241.07	"	"	"		
"	20	"	25	92.51	"	"		
"	26	"	"	99.96	"	"		
"	"	"	"	31.02	"	"		
"	"	"	"	27.4	"	"		
"	"	"	"	3.10	"	"		
"	"	"	"	44.00	"	"		
"	"	"	"	9.65	"	"		
"	"	"	"	49.4	"	"		
"	"	"	"	39.69	"	"		
"	30	"	"	4.25	"	"		
"	"	"	"	1.51	"	"		
"	"	"	"	122.00	"	"		
"	"	"	"	51.00	"	"		
"	5	"	27	465.99	"	"		
"	"	"	"	216.66	"	"		
"	"	"	"	150.00	"	"		
"	"	"	"	113.13	"	"		
"	11	"	"	15.23	"	"		
"	"	"	"	16.97	"	"		
"	"	"	"	7.04	"	"		
"	"	"	"	22.40	"	"		
"	"	"	"	5.49	"	"		
"	"	"	"	9.66	"	"		
"	"	"	"	44.04	"	"		
"	"	"	"	14.96	"	"		
"	"	"	"	5.00	"	"		
"	"	"	"	2.15	"	"		
"	"	"	"	1.03	"	"		
"	"	"	"	29	262.72	"		
"	"	"	"	33	104.05	"		
"	1	"	"	"	30.34	"		
"	"	"	"	"	12.15	"		
"	5	"	"	"	96	"		
"	9	"	"	35	400.65	"		
"	14	"	"	39	4.50	"		
"	20	"	"	"	177.79	"		
				13055.19				13055.19

A. H. Riegelow

1899 July 14	2	bank	5. 37.50	1899 July 21	4	bank	4. 37.50
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1899 Aug 1	2	bank	61. 300.00	Edward A. Darling & Mary Graham Aug 21	14	bank	3.50.00
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A. H. Elliott Jr

1899 July 14	2	bank	5. 25.00	1899 July 21	4	bank	4. 25.00
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C. L. Lacey

1899 July 14	2	bank	5. 39.10	1899 Aug 11	1	of J. L. Lacey	8. 607.94
17	"	"	5. 2.00				
20	"	"	7. 633.61				
Aug 11	"	"	9. 12.53				
			607.94				607.94

1899 Aug 17	2	bank	29. 4000.00	1899 Aug 17	1	of J. L. Lacey	10. 5250.00
26	"	"	1. 1250.00				
			5250.00				5250.00
1899 Aug 12	2	bank	33. 6000.00	1899 Aug 21	1	of J. L. Lacey	13. 11000.00
18	"	"	43. 2500.00				
21	"	"	49. 1500.00				
1899 Aug 23	"	"	61. 1000.00				
			11000.00				11000.00
1899 Aug 4	2	bank	65. 5000.00	1899 Aug 7	1	of J. L. Lacey	21. 10917.15
10	"	"	73. 4000.00				
1899 July 6	"	"	101. 1000.00				
1899 Aug 7	"	"	117. 907.15				
			18917.15				18917.15

## Experiments to Plans No. 15

1999 July	14. 25. Sand	5.	2.53	Aug 16	4769.45
	17.	5.	2474		
	"	5.	2807		
	"	5.	6944		
	20.	7.	15442		
	"	7.	95		
	"	7.	346		
	"	7.	659		
	"	7.	14707		
	"	7.	5770		
	24.	7.	1347		
	"	7.	272		
	26.	7.	1216		
	"	7.	4234		
	"	7.	9474		
	"	7.	1305		
	"	7.	584		
	"	7.	7065		
	"	7.	123		
	29.	7.	1446		
	"	7.	1094		
Aug	"	9.	28742		
	"	9.	6044		
	"	9.	12500		
	11.	9.	27494		
	"	9.	8163.64		
	"	9.	1459		
	"	9.	25000		
	"	9.	1250		
	"	9.	2740		
	"	9.	2695		
	"	9.	50155		
	"	9.	530		
	"	9.	1317		
	"	9.	1500		
	"	9.	2944		
	"	9.	277		
	"	9.	3144		
	"	9.	102		
	"	9.	105		
14.	"	9.	1053		
"	"	9.	762		
16.	"	11.	15000		
"	"	11.	62455		
			4769.45		4769.45

## Experiments to Plans No. 15

1999 Aug	15. 25. Sand	40	4769.45	1999 Aug	15. 25. Sand	40	4769.45
	"	"	546		"	"	546
	"	"	170		"	"	170
	"	"	294		"	"	294
	"	"	35		"	"	35
	30.	"	52532		"	"	52532
Sept	1.	"	13500		"	"	13500
	"	"	25000		"	"	25000
	6.	"	1729		"	"	1729
	"	"	6752		"	"	6752
	"	"	7040		"	"	7040
	"	"	720		"	"	720
	"	"	6200		"	"	6200
	"	"	594		"	"	594
	"	"	149		"	"	149
	"	"	1942		"	"	1942
	"	"	2460		"	"	2460
	"	"	2000		"	"	2000
	"	"	212		"	"	212
	"	"	1114		"	"	1114
	"	"	16413		"	"	16413
	"	"	72		"	"	72
	"	"	1459.54		"	"	1459.54
	"	"	50000		"	"	50000
	"	"	25472		"	"	25472
Oct	4.	"	17. 25000		"	"	17. 25000
	"	"	13000		"	"	13000
	5.	"	44590		"	"	44590
	6.	"	19319		"	"	19319
	7.	"	12423.64		"	"	12423.64
	"	"	50000		"	"	50000
	"	"	5336		"	"	5336
	"	"	2522		"	"	2522
	16.	"	57062		"	"	57062
	17.	"	9400		"	"	9400
	23.	"	24607		"	"	24607
	27.	"	16974		"	"	16974
	"	"	2653		"	"	2653
	"	"	2045		"	"	2045
	"	"	12564		"	"	12564
	"	"	1744		"	"	1744
	24.	"	19. 22450		"	"	19. 22450
	30.	"	32300		"	"	32300
Nov	8.	"	3115		"	"	3115
			14727.50				14727.50

## Experiments of Plans No 18

1792 Jan	5	By Amt found	41 14727 10	1792 Feb	23	By Amt found	42 29337 15
	21	bad	21 12004 71				
			500 00				
			665 46				
			342 93				
			584 40				
Dec	1		23 2245				
			119 84				
			27 03				
			94 93				
	5		237 61				
			374 62				
	18		6 50				
			161 35				
			341 03				
			159 47				
	20		369 49				
	26		25 1594				
			2536				
			242				
			19 60				
			565				
	30		645				
			425 06				
			129 65				
			250 00				
			2559 54				
1790 Jan	5		27 334 94				
	8		27 416 14				
			66 30				
	11		18 01				
			4 07				
			7 39				
			17 50				
			60 10				
			22 96				
			121 13				
			52 00				
			241 79				
			76 72				
	12		29 576 64				
	7		2410 07				
	23		454 04				
			455 67				
			2903 715				
			29337 15				

## Experiments of Plans No 15

1792 Jan	23	By Amt found	42 29337 15	29	20	By Amt found	44 34959 19
	25	bad	29 4 12				
			8 91				
			476 91				
			31 50				
			24 75				
			141				
			22 86				
			10 15				
			65 15				
			27 00				
			31 149				
	1		33 99 25				
			461 01				
	8		447 94				
	12		149 10				
			205 53				
	14		35 547 51				
			52 66				
			30 43				
	18		131 47				
			520 95				
	20		161 23				
			147				
			559				
			107 50				
			57 50				
			637				
			143 01				
			19 20				
			1492				
			11 62				
			465				
			74				
			544				
			21 56				
			18 76				
			201				
			390				
			670				
			503				
			13 19				
			511				
			423 54				
			34959 19				
			34959				

## Experiments by Plans No 16

1900 May	20	By Andy Ford	3496.19	1900 May	15	By Andy Ford	45480.4574
		Lead	47. 4.20				
			407				
			59.92				
			17.64				
	21		647.26				
	22		59. 2.96				
	23		120.25				
			10.29				
			10.84				
			5.96				
			15.99				
			14.36				
			6.12				
			7.06				
			107.45				
			17.64				
			5.64				
			19.32				
May	2		43. 23.46				
			717.4				
			442.96				
	6		1697.27				
			204.33				
	7		117.6				
			5.64				
			2.69				
			536.67				
			424.60				
	9		239.46				
			4.30				
			4.30				
			13.05				
			42.10				
			6.42				
			65.73				
	10		2.23				
			59.53				
	13		147.12				
			193.47				
			237.09				
			566.43				
			4.44				
15			544.76				
			45245.74				

## Experiments by Plans

1900 May	15	By Andy Ford	44458.4574	1900 May	31	By Lendin	11. 1163.34
		Lead	45. 465.00				12.527.40.10
			47. 5.25				
			13.41.18				
			10.2.01				
			64.01				
			15.14				
			34.40				
	16		22.50				
			6.11				
			3.73				
			4.25				
	19		123.15				
			14.40				
			20.5.06				
			49. 20.75				
			59.11				
			16.56				
			3.70				
			4.10				
	22		12.00				
			611.41				
			20.79				
			130.40				
			73.21				
	23		213.5.45				
			204.33				
	26		13.12				
	27		147.29				
			63.94				
			96.00				
			13.07				
			462.42				
	28		54.20				
			27.05				
			199.92				
			622.66				
			57903.44				
							57903.44

## Electric Plant - 1925

1929	11	By Amm. 2 1/2 hrs	5425.70	1929	11	By Amm. 2 1/2 hrs	5425.70	9	521.74
21	1	carb	21.12 259.36	21	1	carb	21.12 259.36	9	29.05
22	1		23.14 127.22	22	1	carb	23.14 127.22	9	4499.39
1930	1		27. 27.61						
1930	9		45.12 172.73						
			5410.14						5410.14
1930	1	By Amm.	4499.39	1930	1	By Amm.	4499.39	7	5457.03
15	1	carb	57. 76.4						
			22.91						
19	1		57. 1.10						
			61. 2.10						
22	1		56						
1931	11		57. 14.46						
			59. 2.50						
15	1		71. 5.47						
			74. 1.75						
19	1		55.72						
22	1		77. 1.74						
25	1		77. 1.05						
June 6	1		55. 10.44						
12	1		77. 147.49						
15	1	By Amm.	15. 17.73						
19	1	carb	0.3						
29	1	carb	97. 14.44						
July 6	1	By Amm.	17. 14.51						
15	1		86.01						
18	1	carb	105. 50						
20	1		50						
23	1		107. 53						
Aug 18	1	By Amm.	20. 61.33						
15	1		21. 19.15						
17	1	carb	117. 12.60						
			5.90						
21	1		119. 24.40						
24	1		121.8 549.67						
27	1	By Amm.	22. 12.24						
29	1	carb	22. 106.96						
Sept 5	1	carb	23. 137.25						
17	1	carb	23. 6.36						
22	1	By Amm.	24. 5.92						
25	1	carb	137. 5.36						
26	1		189. 5.5						
29	1	By Amm.	24. 114.44						
			5457.03						5457.03

## Electric Plant

1930	5	By Amm. 2 1/2 hrs	46 55.51 03	1931	7	By Amm. 2 1/2 hrs	46 55.51 03
10	1	carb	143. 5.00				
13	1		149. 1.72				
20	1	carb	25. 3.05				
23	1	By Amm.	5.97				
27	1	carb	145. 4.75				
28	1	By Amm.	26. 6.51				
14	1	carb	27. 17.45				
20	1	By Amm.	27. 2.00				
22	1	By Amm.	29. 14.22				
22	1	carb	10.64				
1931	12		33. 6.33				
19	1	carb	35. 13.32				
21	1	By Amm.	39. 10.45				
31	1	carb	202. 55				
Sept 5	1	By Amm.	40. 12.32				
12	1	carb	41. 17.77				
25	1	By Amm.	44. 9.53				
Nov 5	1	carb	44. 7.84				
		By Amm.	45. 8.44				
23	1		10.45				
April 5	1		46. 25.52				
10	1	carb	97.44				
23	1	By Amm.	47. 15.69				
2	1		48. 15.76				
11	1	carb	49. 56.47				
24	1	By Amm.	50. 17.24				
June 5	1		50. 25.26				
12	1	carb	51. 36.53				
17	1	carb	249. 30				
24	1	By Amm.	51. 26.44				
July 6	1		52. 34.16				
9	1	carb	53. 56.46				
18	1	carb	53. 25.40				
24	1	By Amm.	53. 40.52				
Aug 1	1		54. 31.54				
		carb	133.79				
9	1	carb	293. 50				
16	1		297. 75				
21	1		25				
23	1	By Amm.	57. 35.77				
26	1	carb	59. 61.10				
27	1	By Amm.	50. 32.54				
			6725.15				

## Electric County

1901 July	7	3y Am. fowl	47. 625.15	25	By Am. fowl	19	Feb 30
	10	Am. fowl	59. 69.67				
	16	By fowl	52. 52.71				
	26	Land	315. 56.15				
	27	By	319. 51.25				
Oct	10	Am. fowl	62. 32.71				
	12	By fowl	63. 57.65				
	25	By	61. 34.19				
Nov	1	Land	331. 58.00				
	6	By	333. 50				
	11	By fowl	65. 38.53				
	12	Am. fowl	66. 51.69				
	14	Land	337. 9.00				
			20.44				
			6.40				
	18	By fowl	341. 43.290				
	23	By fowl	69. 23.47				
Dec	9	Land	70. 51.50				
			51. 51.70				
	11	Am. fowl	71. 51.02				
		Land	353. 16.00				
	13	By	355. 45				
	14	By	9.00				
	21	By fowl	71. 37.64.50				
1902 Jan	23	Land	357. 16.02				
	3	By	361. 22.59				
	6	By	365. 4.25				
	8	By	365. 19.4				
	9	By	47.57				
	10	By fowl	367. 9.85				
	14	Land	74. 45.10				
	15	Am. fowl	369. 21.00				
	17	Land	76. 145.07				
	22	By	371. 54				
			59.6				
	23	By fowl	420				
	29	Land	77. 69.29				
			78. 53.36				
			375. 5.56				
			12.29.55				
	7	By	77. 50				
			20				
			2.64				
			Feb 30				

Feb 30

## Electric County

1902 July	7	3y Am. fowl	47. 623.30	1902 Aug	11	By Am. fowl	21486.97
	8	By fowl	74. 152.76				
	12	Am. fowl	79. 102.74				
	24	By fowl	41. 264.41				
	25	Land	343. 72.20				
Aug	3	By	346. 145.65				
	7	By fowl	347. 64.4				
	12	Am. fowl	41. 402.13				
	15	Land	343. 609.23				
	24	By fowl	347. 75				
	27	Land	349. 10.56				
			35. 509.69				
	27	Land	349. 35.00				
	28	By	391. 53.55				
	29	By	393. 4.33				
	31	Land	393. 3.24				
			4210930.44				
			393. 5.00				
			21486.89				
1902 Sept	1	By Am. fowl	21486.09	1902 Oct	24	By Am. fowl	21486.09
	2	Land	14. 32.68				
			13. 26.1				
			2. 50.71				
			2. 27.03				
			4. 45.00				
			3. 6.93				
	10	By fowl	46. 1440.01				
		Land	6. 9.49				
			7. 15.75				
			1. 25.74				
			9. 57.67				
	12	Am. fowl	46. 145.79				
	17	Land	9. 136.05				
			5.50				
			12.434				
	18	By Am. fowl	47. 444.41				
	19	Land	10. 53.34				
	21	By	11. 14.00				
			4.50.1				
			12. 61.06.1				
	22	By Am. fowl	47. 753.51				
	24	Land	12. 143.31				
			53.53.1				
			32.24.1				
			51745.64				

71.6

117.6





## Material Photographs

1903	July	25	23	2nd	200	1000	July	19	of	bad	2122	1000
1901	July	7		2nd	34	922	July	9			2307	922
						1922						1922
1903	July	15	23	2nd	675	6750	July	24	of	bad	1722	272
1901	July	22		2nd	763	272	July	6			1722	6750
						7092						7092
1903	July	25	23	2nd	500	500	July	25	of	bad	55	500

1903	July	26	23	2nd	200	200	July	19	of	bad	225	200
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1903	July	26	23	2nd	200	911	July	6	of	bad	7092	62
1901	July	15		2nd	32	76304						
1903	July	9		2nd	109	448537						
1901	July	21			127	59253						
1903	July	17			107	764222						
1901	July	26			17	49953						
1903	July	29			129	1777						
1901	July	14			107	17275						
						7092						

## Explorations No 14

1903	July	1	23	2nd	57	17613	12	July	31	of	bad	12	1079177
						41	1395						
						1	740						
						19	40043						
						11	670						
						11	750						
							1779177						
1903	July	4	23	2nd	53	54043	12	July	31	of	bad	132	25
						59	2075						
						63	100						
						71	3446						
						73	90						
						75	5410						
						79	17196						
						101	18498						
						113	18497						
						125	1550						
						133	12534						
						145	11896						
						25	275						
						163	14139						
						26	1253						
						27	54						
						171	50						
						14	12993						
						33	50						
						35	1700						
						199	350						
						203	1625						
						211	15000						
						41	576						
						19	2075						
						147	21505						
							216057						
1902	July	1	23	2nd	2152	04	1901	July	30	of	bad	2160	57
1903	July	7		2nd	91	1325							
1901	July	10			24	15282							
						2323	97						

## Dead Estate m. 16

1799	12	John W. Blinn	98	7904.00	1800	31	By Balance	10147.97
Dec		Annals to Blinn	2	13440.37				
		Annals to Blinn	2	13440.37				
1800	4	Annals to Blinn	10	12702.00				
July		Annals to Blinn	2	9745.19				
		Annals to Blinn	2	12576.00				
		Annals to Blinn	2	4414.00				
		Annals to Blinn	2	2825.00				
Feb	5	Annals to Blinn	33	50				
	9	Annals to Blinn	300	4075.1				
	17	Annals to Blinn	55	512.50				
		Annals to Blinn	2	247.24				
		Annals to Blinn	2	912.50				
	24	Annals to Blinn	39	50.50				
	25	Annals to Blinn	47	0				
May	2	Annals to Blinn	43	2647.50				
	7	Annals to Blinn	2	1207.00				
	7	Annals to Blinn	47	2750.00				
	12	Annals to Blinn	19	24.50				
	27	Annals to Blinn	11	4.00				
	28	Annals to Blinn	51	22.10				
	31	Annals to Blinn	12	2053.00				
1800		Annals to Blinn	10147.97					
Apr	2	Annals to Blinn	10147.97					
	19	Annals to Blinn	61	2.47				
	26	Annals to Blinn	63	1.00				
May	7	Annals to Blinn	57	125.93				
	8	Annals to Blinn	1	41				
	15	Annals to Blinn	73	26.26				
	23	Annals to Blinn	77	7.55				
June	6	Annals to Blinn	55	162.99				
	13	Annals to Blinn	57	64.49				
		Annals to Blinn	1	171.96				
	16	Annals to Blinn	91	6.00				
	19	Annals to Blinn	16	13				
	21	Annals to Blinn	73	119.27				
	26	Annals to Blinn	97	7.24				
July	6	Annals to Blinn	101	164.92				
	21	Annals to Blinn	171	3.10				
	25	Annals to Blinn	107	1.00				
Aug	2	Annals to Blinn	113	35				
		Annals to Blinn	1	154.97				
		Annals to Blinn	2	209.00				
	13	Annals to Blinn	10	10.50				
		Annals to Blinn	10246.26					

## Dead Estate (m. 14)

1800	13	Annals to Blinn	10252.60	1800	1	By Annals to Blinn	26	10.00
Dec		Annals to Blinn	21	163				
	21	Annals to Blinn	119	22.10				
		Annals to Blinn	1	175				
	24	Annals to Blinn	121	25				
		Annals to Blinn	2	29.16				
	27	Annals to Blinn	22	4.90				
	31	Annals to Blinn	125	25.00				
1801	6	Annals to Blinn	135	40.00				
		Annals to Blinn	23	44.41				
	17	Annals to Blinn	1	3.09				
	27	Annals to Blinn	24	12.96				
	28	Annals to Blinn	137	20.40				
Aug	5	Annals to Blinn	24	1.20				
	10	Annals to Blinn	145	1.00				
		Annals to Blinn	1	118.96				
	12	Annals to Blinn	1	33				
	23	Annals to Blinn	25	60				
	28	Annals to Blinn	1	77.4				
	29	Annals to Blinn	17	25				
Nov	6	Annals to Blinn	163	10.26				
		Annals to Blinn	1	141.40				
	1	Annals to Blinn	26	44.41				
	7	Annals to Blinn	167	25				
	20	Annals to Blinn	27	12.40				
Dec	6	Annals to Blinn	29	27.40				
	10	Annals to Blinn	1	11.06				
		Annals to Blinn	75	14.41				
		Annals to Blinn	77	9.20				
	15	Annals to Blinn	79	34.60				
	20	Annals to Blinn	161	12.99				
	22	Annals to Blinn	33	44.75				
	24	Annals to Blinn	101	3.09				
1801	12	Annals to Blinn	35	10.16				
July	15	Annals to Blinn	77	7.9				
	19	Annals to Blinn	41	5.36				
	21	Annals to Blinn	29	7.36				
	23	Annals to Blinn	179	1.00				
	26	Annals to Blinn	201	2.63				
		Annals to Blinn	211	156.00				
Feb	12	Annals to Blinn	41	2.4				
	25	Annals to Blinn	44	14.92				
May	1	Annals to Blinn	104	2.66				
		Annals to Blinn	10412.75					

## Quarries (Limestone, gray, etc., specimens) 751

1949	30	30	bank	25.2	147.00	1949	16	of limestone	10	440.50
1949	31	31	bank	27	120.79	1949	17	Basama	7	124.69.25
1949	7	7	Wilmington Mts	14	252.50.00					
1949	26	26	bank	29	34.27					
					31.56					
					54					
					15.13					
					15.00					
					25.96					
					303.19					
					16.27					
					27.00					
Feb	1	1		33	102.91					
	5	5		2	57.50					
	9	9			3.16					
	14	14		35	123.02					
	20	20			47.053					
					2.16					
					4.90					
					39.20					
					47.29					
	47	47			19.62					
					6.35					
					100.11					
					17.15					
					299.59					
					10.00					
	23	23		29	579.97					
	24	24			927.33					
	25	25			214.74					
					412.445.22					
					91.64					
May	7	7	limestone	13	2.55					
	9	9	bank	11	40.59					
				43	505.00					
					19.45					
	13	13		45	36.00					
					11.76					
	15	15		47	23.13					
					55.64					
	16	16			34.00					
	19	19		49	29.01					
	27	27	top of	11	67.13					
			bank	49	62.63					
					149.09.75					

129.09.75

## Quarries

1949	27	27	Bas	50	124.69.25	1949	21	Basama	127.00.65
1949	28	28	bank	50	204.44				
1949	30	30			29.40				
1949					5.58				
1949					127.00.65				
1949	1	2	Basama	127.00.65	127.00.65				
1949	4	4	bank	53	1.50	1949	23	bank	60. 9.45
1949	7	7	limestone	13	22	1949	24	Wilmington	15. 49.50
1949	11	11	bank	53	42	1949	25	Bas	26.153.36
1949	12	12		55	77.00				
1949					13.19				
1949	20	20		61	260.00				
1949					284.07				
1949	26	26		63	32.15				
1949	28	28	Wilmington Mts	13	21.000.00				
1949	1	1	top of	14	3.50				
1949	2	2	bank	65	30.75				
1949	4	4		67	6.42				
1949	14	14		69	39.13				
1949	18	18		71	3.99				
1949				73	3.67				
1949	19	19		75	22.50				
1949					7.04				
1949	21	21		77	2.41				
1949	23	23		79	27.11				
1949	25	25		81	24.09				
1949	6	6		83	35.50				
1949	12	12			4.50				
1949	14	14	top of	15	10.00				
1949	19	19	limestone		36				
1949	21	21	Wilmington Mts	14	172				
1949			bank	93	120.00				
1949				95	244.39				
1949					1.01				
1949	22	22			17.42				
1949	26	26		97	14.35				
1949					32.19				
1949					5.21				
1949	29	29			6.14				
1949	30	30		99	250.72				
1949	5	5		101	242.45				
1949	6	6	top of	17	12.5				
1949	12	12	bank	101	17.00				
1949					222.50.75				

## Quarries

1928	1929				
July	12	2, Barrow	26153.56	1929	25-4, and fire
	13	Bay Area	17, 455.56	27	464.57
	14	Bar	105.5		
	15	Bar	17, 65.36		
	16	Bar	107, 11.34		
	17	Bar	109, 9.05		
	18	Bar	109, 65.60		
	19	Bar	111, 73.05		
	20	Bar	111, 55		
	21	Bar	113, 22		
	22	Bar	115, 134.75		
	23	Bar	115, 15.5		
	24	Bar	115, 43.46		
	25	Bar	115, 9.21		
	26	Bar	115, 977.42		
	27	Bar	115, 1045.25		
	28	Bar	117, 11.60		
	29	Bar	117, 44.96		
	30	Bar	119, 54		
	31	Bar	119, 50		
	32	Bar	119, 52.5		
	33	Bar	119, 499.15		
	34	Bar	121, 44.6		
	35	Bar	121, 46.20		
	36	Bar	123, 287.2		
	37	Bar	123, 145.09		
	38	Bar	123, 165.51		
	39	Bar	125, 1.90		
	40	Bar	125, 123.97		
	41	Bar	127, 109.20		
	42	Bar	129, 1.00		
	43	Bar	129, 552.50		
	44	Bar	129, 1.60		
	45	Bar	129, 291.42		
	46	Bar	131, 1.55		
	47	Bar	131, 135.97		
	48	Bar	133, 9.76		
	49	Bar	135, 7.25		
	50	Bar	135, 116.29		
	51	Bar	141, 120.48		
	52	Bar	147, 1.07		
	53	Bar	147, 14.07		
	54	Bar	147, 20.95		
	55	Bar	147, 269.50		
	56	Bar	147, 464.57		

## Quarries

1928	1929				
July	25	3, Bay Area	58-464.57	1929	25-4, and fire
	26	Bar	137, 154.76	27	464.57
	27	Bar	139, 25.96		
	28	Bar	141, 65.60		
	29	Bar	143, 114.132		
	30	Bar	143, 70.50		
	31	Bar	143, 65.60		
	32	Bar	143, 1037.10		
	33	Bar	143, 30		
	34	Bar	147, 14.50		
	35	Bar	147, 27.54		
	36	Bar	147, 11.11		
	37	Bar	147, 12.69		
	38	Bar	149, 361.10		
	39	Bar	149, 22.42		
	40	Bar	149, 84.32		
	41	Bar	151, 65.00		
	42	Bar	151, 1.55		
	43	Bar	153, 499.60		
	44	Bar	155, 76		
	45	Bar	155, 170.11		
	46	Bar	155, 194.67		
	47	Bar	157, 26.64		
	48	Bar	157, 14.70		
	49	Bar	157, 84.23		
	50	Bar	157, 27.01		
	51	Bar	159, 153.5		
	52	Bar	161, 26.24		
	53	Bar	161, 64.20		
	54	Bar	161, 100.2		
	55	Bar	164, 6.40		
	56	Bar	165, 11.20		
	57	Bar	165, 21.50		
	58	Bar	165, 16.02		
	59	Bar	165, 20.23		
	60	Bar	167, 60.00		
	61	Bar	167, 60.00		
	62	Bar	167, 90.73		
	63	Bar	167, 332.70		
	64	Bar	167, 145.66		
	65	Bar	167, 44.66		
	66	Bar	167, 22.04		
	67	Bar	167, 279.10		
	68	Bar	167, 539		
	69	Bar	167, 5741.53		

Miss Administration 2012

1980	20	20	29	11.41	1980	20	20	29	11.41
July	20	20	29	11.41	July	20	20	29	11.41
				4500					4500
				903					903
Aug	1		33	11439					
				60.00					60.00
	5		10	250.00					250.00
				225.00					225.00
				269.25					269.25
	9			242					242
	12			500.00					500.00
	20		35	1430					1430
				646					646
				690					690
			37	253					253
				367					367
				1631					1631
	23		39	17772					17772
	24			246.47					246.47
	25			865					865
				206					206
May	2		41	27					27
	3		41	20					20
				250.00					250.00
				200.00					200.00
	6			500.00					500.00
	7			30					30
		Sturdom 12	11	1095					1095
	9	bank	43	4965					4965
	15		47	2947					2947
	16			469					469
				420					420
				400					400
	27	Bank	11	20064					20064
	23	bank	49	500.00					500.00
	24		51	267.05					267.05
	29			250.00					250.00
				225.00					225.00
1980				4449.75					4449.75
Apr	1	30	20	4449.75					4449.75
	4	bank	53	10.00					10.00
	7	Sturdom	13	1.53					1.53
	11	bank	53	49					49
			53	1372					1372
	12			57.02					57.02
				4572.49					4572.49

Miss Administration

1980	12	20	29	11.41	1980	12	20	29	11.41
Apr	12	20	29	11.41	Apr	12	20	29	11.41
	16	bank	57	2566					2566
	19			11.02					11.02
				54.84					54.84
			39	514					514
				951					951
				40					40
			61	109					109
	23			951					951
				250					250
	26		63	334					334
				9542					9542
				2145					2145
May	1	30	20	4449.75					4449.75
		bank	14	25275					25275
			15	20403					20403
				500.00					500.00
	2			11557					11557
				612					612
			67	1030					1030
	11			1704					1704
			69	1039					1039
				424					424
				4400					4400
	14			12250					12250
		30	14	39269					39269
	17	bank	71	1216					1216
	18			925					925
			70	24433					24433
				500.00					500.00
	19			3335					3335
				3570					3570
	21		75	475					475
	23		77	1270					1270
				1579					1579
	24			759					759
			79	1690					1690
				22050					22050
				2646					2646
		Sturdom	14	1.05					1.05
	25	bank	79	7625					7625
	29			1581					1581
				494					494
				6751					6751
				5049					5049
				7961.65					7961.65

## Misc Administration

1900	Aug	29	30	Ant-farm	61	7991.50	1900	Aug	19	62	By the	11	47.37
				band	11	794			25	105	By the	11	23.00
						5.29			5	By the	61	12.49.47	
						500.00							
						225.00							
						4.69							
June		2		By the	151	662.50							
		4		band	155	402							
						6.93							
						3.51							
		6		By the	151	704.22							
				band	151	561							
						13.23							
		7				2.65							
					27	10.45							
		12			79	514							
						3.67							
		13				6.00							
						2.41							
		14			91	16.95							
						2.06							
		16				1.05							
						2.17							
						2.57							
		18		By the	151	104.46							
		19		band	16	20.44							
		21			95	3.72							
						3.35							
						10.40							
						3.75							
					95	39.34							
		22				5.21							
						19.10							
					97	76.96							
						13.44							
						1.67							
		26				15.63							
		27				62.65							
		30			99	500.00							
						216.67							
						1.50							
						5.71							
July		5			101	12.90							
						1.62							
						12940.44							

12940.44

## Misc Administration

1900	Aug	5	20	By the	62	12.49.47	1900	Aug	13	63	By the	17	19.50
				band	101	2.44						20	15.75
						3.04						21	15.25
		6		By the	17	9.56.31						21	3.4.5
		12		band	103	11.4.2						64	10.4.4.2
		13				16.62							
						16.59							
						12.17							
				By the	17	6.4.22							
		16		band	105	51.41							
		20				4.00							
		21		band	17	72.11							
		23		band	107	2.30							
						1.44							
						11.71							
						3.53							
		25				4.43							
		26				37.50							
						6.54							
		31			109	4.5							
					111	16.62							
Aug		2			113	2.7.3							
						21.6.7							
						500.00							
		3				24.50							
		4				46.25							
		9			115	12.40							
						1.50							
		13		By the	20	339.51							
		15			21	633.60							
		17		band	117	16.4.52							
		21				77							
					119	6.96							
						50.70							
						25.47							
		22			121	66.33							
		24				50.00							
						4.41							
						22.24							
					122	7.65							
						5.70							
						2.40							
						1.23							
		27		By the	22	655.13							
						12.2.7.27							

122.7.27

## Price Administration

1970	1970	1970	1970	1970	1970
Aug	27	20	Barman	32	1514.02
	28	21	Barman	22	3.99
	30	22	Barb	123	559.50
				22	22.50
	31			125	25
					49.57
					4.05
				123	2.80
					95.21
				129	2.00
					117.7
					75
					332
					266
					577.4
					3.15
					2.95
				131	16.50
Dec	6			133	159.75
	8		Pay (Bar)	23	645.17
	12		Barb	133	11.03
				135	7.45
	14				99.85
	17		Barman	23	2.99
	22		Pay (Bar)	24	603.92
	25		Barb	132	1.09
					11.65
				139	19.60
					16.96
	26				277.4
Oct	4			143	800.70
					205.33
					15.26
	8		Pay (Bar)	24	592.35
	10		Barb	143	98.15
	12			145	51.74
					4.33
					3.17
				147	7.02
					2.69
					60
					1.40
					7.25
					2.91
					224.797
					1677

## Price Administration

1970	1970	1970	1970	1970	1970
Oct	12	20	Barman	44	22190.79
			Barb	149	47.15
	13				2.40
					190.00
	19			151	12
					72.64
	20			155	57.50
					6.97
			Barman	25	7.25
	23		Pay (Bar)		606.34
	29		Barb	155	5.40
				157	1.50
					147.70
					144.50
					5.23
	30			159	60.79
					75.30
					119.44
Nov	2			161	500.50
					225.00
	5				15.63
					1.60
					1.05
					1.75
	6			163	30.50
	7			165	25
	14		Pay (Bar)	26	645.43
	14		Barman	27	57.57
	20		Pay (Bar)	27	620.41
	22		Barb	169	25
	27			171	72
	30			173	500.00
					216.67
					345.1
Dec	1			175	4.95
	6			29	632.24
	10				3490
				177	5.75
	18			179	10.00
				179	2.75
					1.50
					22.50
	18			181	12
	24				7.90
					2290.62



## Flords &amp; Railways No 10

1880	26	20	baib	59.	5330	1880	16	20	baib	49.	44711
1881	1	1	baib	51.	5200	1881	19	1	baib	49.	1403
1882	1	1	baib	51.	63500	1882	19	1	baib	49.	15493
1883	1	1	baib	51.	11942	1883	19	1	baib	49.	15493
1884	1	1	baib	51.	2239	1884	19	1	baib	49.	15493
1885	1	1	baib	51.	1354	1885	19	1	baib	49.	15493
1886	1	1	baib	51.	12950	1886	19	1	baib	49.	15493
1887	1	1	baib	51.	1247	1887	19	1	baib	49.	15493
1888	1	1	baib	51.	19350	1888	19	1	baib	49.	15493
1889	1	1	baib	51.	2500	1889	19	1	baib	49.	15493
1890	1	1	baib	51.	9945	1890	19	1	baib	49.	15493
1891	1	1	baib	51.	22555	1891	19	1	baib	49.	15493
1892	1	1	baib	51.	7625	1892	19	1	baib	49.	15493
1893	1	1	baib	51.	16574	1893	19	1	baib	49.	15493
1894	1	1	baib	51.	1500	1894	19	1	baib	49.	15493
1895	1	1	baib	51.	44632	1895	19	1	baib	49.	15493
1896	1	1	baib	51.	42050	1896	19	1	baib	49.	15493
1897	1	1	baib	51.	4352000	1897	19	1	baib	49.	15493
1898	1	1	baib	51.	2417	1898	19	1	baib	49.	15493
1899	1	1	baib	51.	418255402	1899	19	1	baib	49.	15493
1900	1	1	baib	51.	450135000	1900	19	1	baib	49.	15493
1901	1	1	baib	51.	6553	1901	19	1	baib	49.	15493
1902	1	1	baib	51.	2765963	1902	19	1	baib	49.	15493
1903	1	1	baib	51.	1955	1903	19	1	baib	49.	15493
1904	1	1	baib	51.	10220	1904	19	1	baib	49.	15493
1905	1	1	baib	51.	7871	1905	19	1	baib	49.	15493
1906	1	1	baib	51.	9560	1906	19	1	baib	49.	15493
1907	1	1	baib	51.	244676	1907	19	1	baib	49.	15493
1908	1	1	baib	51.	5224	1908	19	1	baib	49.	15493
1909	1	1	baib	51.	5520	1909	19	1	baib	49.	15493
1910	1	1	baib	51.	30537	1910	19	1	baib	49.	15493
1911	1	1	baib	51.	10574	1911	19	1	baib	49.	15493
1912	1	1	baib	51.	7256	1912	19	1	baib	49.	15493
1913	1	1	baib	51.	296	1913	19	1	baib	49.	15493
1914	1	1	baib	51.	1639463	1914	19	1	baib	49.	15493
1915	1	1	baib	51.	1549349	1915	19	1	baib	49.	15493
1916	1	1	baib	51.	27471	1916	19	1	baib	49.	15493
1917	1	1	baib	51.	21909	1917	19	1	baib	49.	15493
1918	1	1	baib	51.	2647	1918	19	1	baib	49.	15493
1919	1	1	baib	51.	13	1919	19	1	baib	49.	15493
1920	1	1	baib	51.	170	1920	19	1	baib	49.	15493
1921	1	1	baib	51.	15000	1921	19	1	baib	49.	15493
1922	1	1	baib	51.	2247	1922	19	1	baib	49.	15493
1923	1	1	baib	51.	246	1923	19	1	baib	49.	15493
1924	1	1	baib	51.	1779595	1924	19	1	baib	49.	15493

## Flords &amp; Railways

1880	16	20	baib	57.	1779595	1880	16	20	baib	57.	1779595
1881	19	1	baib	57.	95	1881	19	1	baib	57.	95
1882	1	1	baib	57.	1972	1882	19	1	baib	57.	1972
1883	1	1	baib	57.	1617	1883	19	1	baib	57.	1617
1884	1	1	baib	57.	220000	1884	19	1	baib	57.	220000
1885	1	1	baib	57.	3024	1885	19	1	baib	57.	3024
1886	1	1	baib	57.	404	1886	19	1	baib	57.	404
1887	1	1	baib	57.	3415	1887	19	1	baib	57.	3415
1888	1	1	baib	57.	1735	1888	19	1	baib	57.	1735
1889	1	1	baib	57.	242	1889	19	1	baib	57.	242
1890	1	1	baib	57.	4580	1890	19	1	baib	57.	4580
1891	1	1	baib	57.	344	1891	19	1	baib	57.	344
1892	1	1	baib	57.	27775	1892	19	1	baib	57.	27775
1893	1	1	baib	57.	13215	1893	19	1	baib	57.	13215
1894	1	1	baib	57.	525	1894	19	1	baib	57.	525
1895	1	1	baib	57.	744	1895	19	1	baib	57.	744
1896	1	1	baib	57.	247	1896	19	1	baib	57.	247
1897	1	1	baib	57.	9794	1897	19	1	baib	57.	9794
1898	1	1	baib	57.	1295	1898	19	1	baib	57.	1295
1899	1	1	baib	57.	259779	1899	19	1	baib	57.	259779
1900	1	1	baib	57.	419	1900	19	1	baib	57.	419
1901	1	1	baib	57.	10476	1901	19	1	baib	57.	10476
1902	1	1	baib	57.	1950	1902	19	1	baib	57.	1950
1903	1	1	baib	57.	1000	1903	19	1	baib	57.	1000
1904	1	1	baib	57.	2316	1904	19	1	baib	57.	2316
1905	1	1	baib	57.	109946	1905	19	1	baib	57.	109946
1906	1	1	baib	57.	1416	1906	19	1	baib	57.	1416
1907	1	1	baib	57.	153	1907	19	1	baib	57.	153
1908	1	1	baib	57.	18722	1908	19	1	baib	57.	18722
1909	1	1	baib	57.	2110432	1909	19	1	baib	57.	2110432
1910	1	1	baib	57.	1400	1910	19	1	baib	57.	1400
1911	1	1	baib	57.	9556	1911	19	1	baib	57.	9556
1912	1	1	baib	57.	1311	1912	19	1	baib	57.	1311
1913	1	1	baib	57.	1600	1913	19	1	baib	57.	1600
1914	1	1	baib	57.	2700	1914	19	1	baib	57.	2700
1915	1	1	baib	57.	14601	1915	19	1	baib	57.	14601
1916	1	1	baib	57.	14123	1916	19	1	baib	57.	14123
1917	1	1	baib	57.	5390	1917	19	1	baib	57.	5390
1918	1	1	baib	57.	1114	1918	19	1	baib	57.	1114
1919	1	1	baib	57.	5054	1919	19	1	baib	57.	5054
1920	1	1	baib	57.	4742	1920	19	1	baib	57.	4742
1921	1	1	baib	57.	344205	1921	19	1	baib	57.	344205
1922	1	1	baib	57.	13250	1922	19	1	baib	57.	13250
1923	1	1	baib	57.	326796	1923	19	1	baib	57.	326796
1924	1	1	baib	57.	3402516	1924	19	1	baib	57.	3402516

## Gardes &amp; Railways

1900	6	25	County Road	57	34025.16	1900	13	25	County Road	57	34025.16
			land	15.	3.59						
	7				76.23						
					96.72						
				27.	2.61						
	12				3.53						
					0.62197						
					29.127						
					13.414.53						
					93.60						
				29.	14.400						
					63.06						
					62.72						
	13				213.50.00						
					34.71						
					72.7						
					22.400						
					54.72						
	14			41.	59.70						
	16				20.13						
	17	Pay (Rev)		15.	23.14.73						
	19	Shut down		16.	157.65						
	21	Pay (Rev)		16.	45.36						
		land		91.	44.10						
				95.	113.97						
					41.60						
					96.20						
					12.6.44						
					122.74						
				95.	2.25						
	22				459.03						
	26			97.	64.40						
					21.501						
	29				19.77						
July	5			101.	5.72						
					2.63						
	6	Pay (Rev)		17.	2702.49						
	12	land		106.	8.24						
	13				2476.74						
					191.20						
					33.5.14						
					20.00						
					40.13						
		Pay (Rev)		17.	14.22.53						
					206.54.77						

20654.77

## Gardes &amp; Railways

1900	13	25	County Road	60	50654.77	1900	13	25	County Road	60	50654.77
			land	105.	16.74						
	21		Shut down	17.	167.65						
	23		land	145.	23.65						
				107.	9.90						
					105.60						
					14.5.10						
	25				67.44						
	31				251.00						
					114.10						
				109.	6.12						
					72.46						
					145.01						
				111.	90						
Aug	2			113.	3.70						
	3				11.76						
	9			115.	17.5						
					67.00						
					14.60						
					224.10						
	13	Pay (Rev)		20.	97.133						
	15			21.	745.42						
	17	land		117.	17.50						
	21				89.96						
					24.54						
				119.	44.03						
					15.22						
	24			121.	113.9						
				123.	41.45						
	27	Pay (Rev)		22.	647.05						
	29	Shut down		22.	203.23						
	31	land		125.	207.50						
				127.	34.75						
				129.	109.253						
					520.42						
					21.00						
		Water Ranting		22.	450.00						
Sept	4	Pay (Rev)		23.	59.149						
	12	land		135.	169.92						
					253.01						
					5.04						
	17	Shut down		23.	132.06						
	22	Pay (Rev)		24.	467.95						
	25	land		137.	6.61						
					573.92.57						

57392.57

## Grading

1900	26	27	Barb	31.	19.15	1900	11	of Barman	32.55
Feb	1	.		33.	14.5				
Mar	27	.	Boy ch	11.	11.25				32.55
					32.55				
Apr	1	23	Barman	32.55	40.00	26	40.00		
	11	.	Barb	53.	9.00	27	60.59.37		
	23	.		61.	9.26				
					2.21				
May	1	.	Boy ch	14.	17.43				
June	26	.	Barb	97.	32.19				
July	6	.	Boy ch	17.	140.33				
July	13	.			53.75				
	21	.	Barb		4.93				
	31	.	Barb	109.	63.09				
Aug	9	.		115.	43.46				
					9.31				
	13	.	Boy ch	20.	249.49				
	15	.		21.	447.69				
	21	.	Barb	117.	44.96				
	24	.		121.	4.21				
				123.	20.72				
	27	.	Boy ch	22.	27.93				
	27	.	Barb		29.12				
Sept	1	.	Boy ch	23.	266.27				
	17	.	Barb		15.15				
	22	.	Boy ch	24.	266.15				
	25	.	Barb	117.	9.50				
	28	.		119.	25.96				
Oct	4	.		143.	70.50				
	1	.	Boy ch	24.	262.01				
	14	.	Barb	149.	257.46				
	20	.	Barb	25.	2.03				
	23	.	Boy ch		711.75				
	29	.	Barb	117.	25.44				
Nov	5	.		161.	64.20				
				115.	14.93				
	7	.	Boy ch	26.	103.21				
	14	.	Barb	27.	2.15				
	17	.	Barb	167.	44.66				
	20	.	Boy ch	27.	410.39				
	22	.	Barb	149.	21.54				
Dec	6	.	Boy ch	29.	360.44				
	10	.	Barb		37.5				
	15	.	Barb	77.	62.04				
					6109.37				6109.37

## Grading

1900	15	23	Barman	70	6069.37	1901	21	Boy ch	12.5
Dec	15	.	Barb	117.	1471	Dec	12	Barman	72.1500.43
	22	.	Boy ch	33.	24.30				
Jan	9	.	Barb	191.	24.27				
	12	.	Boy ch	25.	215.57				
	19	.	Barb	34.	619				
	21	.	Boy ch	39.	296.53				
Feb	1	.		40.	49.77				
	12	.	Barb	41.	54.5				
	25	.	Boy ch	44.	44.5				
Mar	1	.		45.	127.25				
	23	.			33.193				
Apr	1	.		46.	1126.44				
	10	.	Barb	46.	57.14				
	23	.	Boy ch	47.	1130.73				
May	9	.		48.	530.46				
	11	.	Barb	49.	59.70				
	24	.	Boy ch		515.51				
June	7	.	Barb	25.	1278				
	7	.	Boy ch	50.	534.49				
	12	.	Barb	51.	61.71				
	17	.	Barb	269.	76.5				
	24	.	Boy ch	51.	554.3				
	27	.	Barb	475.	2.50				
July	6	.	Boy ch	52.	297.05				
	9	.	Barb	53.	73.07				
	11	.	Barb	279.	5.15				
	24	.	Boy ch	53.	460.4				
	31	.	Barb	283.	5.00				
Aug	1	.	Boy ch	54.	410.37				
		.	Barb		52.34				
	9	.	Barb	293.	5.00				
	21	.		297.	5.50				
	23	.	Boy ch	57.	57.55				
	25	.	Barb	303.	5.00				
Sept	6	.		309.	9.00				
	7	.	Boy ch	54.	515.60				
	10	.	Barb	57.	19.90				
	12	.	Barb	311.	1.62				
	20	.		313.	1.00				
	16	.	Boy ch	59.	94.04				
	26	.	Barb	317.	30.34				
Oct	10	.	Barb	62.	49				
	12	.	Boy ch	63.	110.48				
					15001.65				15001.65



*Shord Norm* 22.15

1980	26	29	Carb	31.	15.15	1980	11	180	51
July					152.44	Aug	1	20	17.54
					19.50				
					19.45				
July	16.		Shord	10.	1304.11				
	20.		Carb	35.	1166				
					972				
					1501				
					50.47				
					822				
	24.			34.	75				
	24.				490				
	24.				285				
					75				
				41.	514				
					180				
					15402				
					2614				
Aug	9.			45.	1572				
	15.				1357				
				47.	4925				
					5922				
	16.				562				
					192				
					621				
	17.				1522				
				49.	1900				
	21.			51.	13034				
					289				
					21102				
Aug	11.	29	Barnum		2017.4	Aug	7.	20	65.52
	11.		Carb	51.	345		30.	20	2122.53
	16.				25				
					16.44				
					1062				
					525				
	19.				971				
				19.	2640				
					4990				
					207				
	20.				375				
					1064				
	30.			63.	4994				
					5524				
					224107				

224107

*Shord Norm*

1980	30	29	Barnum	2122.53	1980	24	20	20	20
Aug			Carb	63.	9.57	Aug	19	20	20
July	1		Shy Carb	14.	23.54				
	7		Carb	67.	30.10				
	11			69.	10.24				
					534				
	14				110.89				
	2		Shy Carb	14.	62.16				
	11		Carb	71.	776				
				73.	920				
	19			75.	454				
					1047				
					10762				
					541				
					7894				
	4			77.	647				
					167				
	29			79.	7035				
	30			81.	65411				
					561				
					1904				
	31				2370				
					1997				
					6239				
June	2		Shy Carb	15.	319				
	4		Carb	15.	4155				
					2314				
	6				993				
					422				
					30839				
	7				3075				
	12			17.	203				
					206				
				19.	2693				
	13				804				
	14			91.	6446				
					4900				
					2479				
					7930				
					1074				
	16				4163				
					5915				
	21			93.	6374				
					894				
					442150				

442150

## Store Room

1920	21	22	Bottom	374.09	1920	21	22	of Lamb	95	570	57
June	21	22	Back	95.49	July	21	22	of Lamb	17	1428	54
				13.50	21	22	of Lamb	17	1428	54	
				3.14	21	22	of Lamb	20	1925	54	
				4.94	21	22	of Lamb	20	1925	54	
				1.40	21	22	of Lamb	20	1925	54	
				7.12	21	22	of Lamb	20	1925	54	
				16.60	21	22	of Lamb	20	1925	54	
				4.12	21	22	of Lamb	20	1925	54	
				2.07	21	22	of Lamb	20	1925	54	
				5.77	21	22	of Lamb	20	1925	54	
				11.91	21	22	of Lamb	20	1925	54	
July	5			10.1	21	22	of Lamb	20	1925	54	
				63.50	21	22	of Lamb	20	1925	54	
				13.03	21	22	of Lamb	20	1925	54	
				15.34	21	22	of Lamb	20	1925	54	
				2.20	21	22	of Lamb	20	1925	54	
				2.20	21	22	of Lamb	20	1925	54	
				119.40	21	22	of Lamb	20	1925	54	
				105.216	21	22	of Lamb	20	1925	54	
				24.16	21	22	of Lamb	20	1925	54	
				192	21	22	of Lamb	20	1925	54	
				15.64	21	22	of Lamb	20	1925	54	
				13.03	21	22	of Lamb	20	1925	54	
				30.62	21	22	of Lamb	20	1925	54	
				12.01	21	22	of Lamb	20	1925	54	
				70.44	21	22	of Lamb	20	1925	54	
				139.94	21	22	of Lamb	20	1925	54	
				52.43	21	22	of Lamb	20	1925	54	
				9.14	21	22	of Lamb	20	1925	54	
				13.51	21	22	of Lamb	20	1925	54	
				77.42	21	22	of Lamb	20	1925	54	
				3.62	21	22	of Lamb	20	1925	54	
Aug	2			115.21	21	22	of Lamb	20	1925	54	
				3.14	21	22	of Lamb	20	1925	54	
				0.27	21	22	of Lamb	20	1925	54	
				73.03	21	22	of Lamb	20	1925	54	
				5.25	21	22	of Lamb	20	1925	54	
				26.12	21	22	of Lamb	20	1925	54	
				2.25	21	22	of Lamb	20	1925	54	
				9.57	21	22	of Lamb	20	1925	54	
				4.67	21	22	of Lamb	20	1925	54	
				17.2	21	22	of Lamb	20	1925	54	
				4.59	21	22	of Lamb	20	1925	54	
				56.40	21	22	of Lamb	20	1925	54	
				56.40	21	22	of Lamb	20	1925	54	

## Store Room

1920	21	22	Aug	370.90	1920	21	22	Aug	114.50
Aug	21	22	back	119.23	Aug	21	22	back	44.54
				110.2					
				35.41					
				12.1					
				37.19					
				46.99					
				35.21					
				6.29					
				15.19					
				10.71					
				17.09					
				543.02					
				58.47					
				46.43					
				30					
				6.57					
				6.21					
				70.14					
				11.16					
				3.46					
				31.79					
				5.65					
				4.47					
				25.61					
				4.60					
				12.94					
				14.44					
				6.69					
				7.41					
				90.59					
				52.65					
				29.20					
				102.50					
				3.29					
				75.11					
				1.91					
				46.16					
				17.20					
				19.54					
				54.54					
				59.03					
				3.23					
				8.42					
				36.70					
				33.97					
				3539.37					







## Equipment &amp; Maintenance 7-9

1970	25	27	Bank	51.	1125	1970	51	of Balance	5005.55
July	1	.	.	53.	126.40				
Aug	1	.	.	59.	606.42				
	1	.	.	41.	174.70				
Aug	7	.	.	43.	45.04				
	1	.	.	.	16.64				
	9	.	.	.	81010.00				
	1	.	.	.	373.30				
	10	.	.	45.	12.34				
	15	.	.	.	19.40				
	1	.	.	14	165.16				
	1	.	.	47.	112.94				
	1	.	.	.	53.7				
	1	.	.	.	63.75				
12	1	.	.	47.0	154.92				
21	1	.	.	51.	11.50				
30	1	.	.	.	18.92				
1	1	.	.	.	45.00				
1	1	.	.	.	31.94				
					5005.55				5005.55
April	1	By Balance		5005.55	By +	By Amos fund			11171.92
4	1	Bank	53.	20.54					
7	1	Bank	13.	614.44					
12	1	Bank	55.0	266.00					
16	1		57.0	179.79					
19	1		.	74.21					
1	1		.	54.10					
1	1		.	42.91					
1	1		.	1.04					
1	1		59.	4.05					
1	1		44.53.00						
1	1		11.76						
1	1		203413.00						
23	1		61.1	100.41					
1	1		.	4.21					
26	1		.	110.35					
30	1		63.	42.51					
1	1		.	26.2					
1	1		.	55.2					
Aug	1		65.	1.76					
1	1		.	53.5					
1	1		.	30.4					
1	1		.	4.16					
1	1		.	60.32					
				1171.92					1171.92

## Equipment &amp; Maintenance

1970	4	By Amos fund	11471.92	1970	6	By Amos fund	141621.45
Aug	1	Bank	65.16	246.57			
	7	.	67.	3.53			
	11	.	.	15.64			
	1	.	69.	1.35			
	1	.	.	3.26			
	1	.	.	4.56			
	1	.	.	3.14			
	14	.	.	56.75			
	1	.	.	120.74			
	1	By Amos fund	14.	177.23			
	7	Bank	71.	176.40			
	1	.	.	1.44			
	1	.	.	16.74			
	1	.	.	31.36			
	1	.	.	3.04			
	1	.	.	164.00			
	1	.	.	35.24			
	15	.	.	14.12			
	1	.	75.	1.95			
	19	.	.	5.00			
	1	.	.	15.00			
	1	.	.	83.10			
	1	.	75.0	265.00			
	1	.	.	1165.01			
	1	.	.	8.42			
	1	.	.	77.4			
	1	.	.	32.93			
	21	.	.	81305.79			
	23	.	77.	84.75			
	1	.	.	12.79			
	1	.	.	4.95			
	1	.	.	64.20			
	1	.	.	61.24			
	24	.	.	61.90			
	1	.	79.	56.36			
	1	.	.	14.90			
	1	Bank	14.	71.77			
	27	Bank	79.	24.41			
	29	.	.	3.92			
	30	.	41.	13			
	1	.	.	22			
June	2	By Amos fund	15.	373.97			
	6	.	15.	554.44			
				1621.53			1621.53

## Equipment &amp; Maintenance

1980 June	6	2	Aug formal	1625.53	1980 Aug	15	2	Aug formal	55.2576404
			Land	15. 945					
				11975.00					
	7			990					
				2066					
	12			27. 733					
				2275					
				11071.00					
				113093.50					
				11025.00					
	16			91. 25					
				5910					
	18		Aug Land	15. 40923					
	19		Structure	16. 7296					
	21		Land	93. 1525					
				139000					
				14635					
				95. 810					
				5509					
				964					
				500					
	22			27. 5241					
				7045					
	26			3220					
				5561					
	29			1495					
July	5			101. 1135					
				1133					
				559					
	6		Aug Land	17. 55607					
	12		Land	111. 645					
	13			103. 5716					
			Aug Land	17. 40446					
	16		Land	105. 94					
	20			54					
	21		Structure	17. 14449					
	25		Land	117. 139					
	31			109. 2275					
				111. 514					
	2			113. 706					
Aug	9			115. 4346					
				931					
	13		Aug Land	20. 27444					
	18			24446					
				2576404					

2576404

## Equipment &amp; Maintenance

1980 Aug	15	2	Aug Land	2576404	1980 Aug	17	2	Aug Land	2576404
			Land	17. 211					
				625					
	21			4496					
				104					
				119. 450					
				147					
	22			54					
				25					
	24			258. 21					
				461					
				1344					
				1234					
				2072					
	27		Aug Land	22. 25478					
	28		Structure	22. 16459					
Aug	31		Land	125. 441					
				161					
				127. 446					
				2363					
				8630					
				129. 1329					
				900					
				6044					
				131. 150					
				23. 2786					
Apr	12		Aug Land	133. 104					
	12			135. 12000					
				549					
	14			50					
				293					
	17		Structure	23. 14234					
	22		Aug Land	24. 22183					
	25		Land	117. 1259					
				980					
				2727. 04					
	27			119. 2623					
	29			111. 2620					
				2229					
				143. 2050					
Oct	4			2444					
			Aug Land	24. 20529					
	10		Land	143. 450					
	12			145. 70					
				1739					
				2002774359					

2002774359

## Steam Plant, No. 6

May	5	20	Coal	53.	164	May 31	By Balance	744
	9			12				
	20			27	560			
					744			744
April	1	3	Balance		744	May 24	By Cash 25.00	59
	19		Coal	51.	4260	April 5	By Cash	46
May	1		By Cash	25.	1074	25		47
	7		Coal	47.	1207	May 7	By H. & A. Co.	44
	23			17.	665	June 12	Balance	47
June	21	Sept 8	By Cash	16.	2241			6679
Aug	15		By Cash	21.	53			
Oct	23		By Cash	25.	7254			
Nov	5		By Cash	26.	2775			
	14		Steam	27.	1646			
	20		By Cash	27.	3757			
Dec	6		By Cash	29.	5974			
	22		By Cash	33.	11351			
Jan	12		By Cash	35.	5235			
	17		Coal	47.	11440			
	19		Steam	54.	9661			
	21		By Cash	59.	21592			
Feb	5			40.	17466			
	12		Steam	41.	1727			
	14		Coal	41.	935			
	25		By Cash	44.	2444			
	28		Coal	219.	4600			
May	5		Steam	44.	3066			
			By Cash	45.	5962			
	12		Coal	221.	565			
	22		By Cash	45.	7461			
	27		Coal	245.	750			
April	10		By Cash	46.	1946			
	25		Steam	46.	723			
	28		By Cash	47.	2471			
	29		Coal	271.	50			
May	9		By Cash	44.	726			
	10		Coal	255.	17314			
	11		Steam	49.	244			
	24		By Cash	49.	1950			
			Coal	21.	4415			
June	5		By Cash	50.	2136			
	12		Steam	51.	307			
					6854.15			6854.15

## Steam Plant

May	12	3	Balance	75	6077.14	May 7	By Cash	504	25
	17		Coal	267.	525	May 15	By Cash	54	59.19
	19			271.	6772		Balance	54	59.19
	24		By Cash	51.	4555			54	59.19
	25		Coal	225.	2301				
July	5		By Cash	52.	2222				
	9		Steam	53.	2567				
	10		Coal	277.	322				
	11			279.	50				
	24		By Cash	53.	10575				
	31		Coal	203.	6250				
Aug	1		By Cash	54.	3705				
			Steam	54.	2566				
	2		Coal	247.	374				
	5			249.	25				
	6			241.	1530				
	28		By Cash	57.	4415				
Sept	7			54.	1346				
	10		Steam	59.	4446				
	12		Coal	509.	9344				
	15			511.	190				
	24		By Cash	59.	2995				
	25		Coal	513.	1852				
	26			517.	5494				
				519.	995				
	25			519.	2625				
				519.	6574.5				
Oct	10		Steam	62.	1666				
	12		By Cash	63.	3741				
	23			63.	2806				
	29		Coal	527.	207				
Nov	1			531.	1950				
	6			533.	125				
	7			535.	91				
	11		By Cash	65.	1200				
	12		Steam	66.	4122				
	23		By Cash	69.	235				
				70.	7155.54				
Dec	9		Steam	71.	1845				
	11		By Cash	71.	1766				
	22		By Cash	73.	7129.50				
Jan	10			73.	5920.00				
	18		By Cash	74.	1940				
	15		Steam	76.	2441				
					66850.12				66850.12



*Shipping 1897 (also Water, Oysters, Pottery, Fish, etc.)*

1900 July Aug	9 15	2 3	Load Load	33. 45.0	1.41 299.67	1900 Aug 31	of Balance)	301.31
				381.31				301.31
April	1	2	Barren		301.31	1900 Apr 26	of Drawn down	9.11
	4		Load	33.	10.58	Apr 15		763.44
	7		Shut down	13.	1.40	Aug 25	Barren	91.4794
May	1		Pay due	14.	4.63			
	7		Load	67.8	416.10			
	24		Shut down	14.	41			
June	2		Pay due	15.	2.50			
	19		Shut down	15.	15.48			
July	6		Pay due	17.	9.75			
	12				51.59			
	21		Shut down		290.95			
Aug	24		Load	121.	7.65			
	27		Pay due	22.	132.			
	27		Shut down		17			
Sept	1		Pay due	23.	52.5			
	17		Shut down		17.21			
	24		Pay due	24.	3.60			
Oct	8		Pay due		770			
	20		Shut down	25.	116			
	23		Pay due		1530			
Nov	1		Pay due	26.	336.34			
	14		Shut down	27.	6.75			
	20		Pay due	27.	240.24			
Dec	6		Pay due	29.	367.10			
	10		Shut down		77.25			
			Load	175.	49.09			
				177.	2.45			
	15			179.0	763.04			
	15			181.	3.20			
	21			183.0	135.75			
					330			
1901 Jan	22		Pay due	33.	506.99			
	10		Load	194.	109.21			
					632			
	12		Pay due	35.	577.02			
	17		Load	197.	55.10			
	18				9.05			
	19		Shut down	36.	477.96			
	21		Pay due	37.	473.40			
	23		Load	197.	500			
	26			201.	162.47			
					5070.36			5070.36

*Shipping 1897*

1901 Jan	26	2	Barren		4794.21	1901 Jan 9	of Pay due	4.44
	30		Load	203.	94.01	Jan 2	Barren	92.0314
					10.65			
				209.	47.12			
Feb	1		Pay due	40.	413.00			
			Load	209.	14.50			
	12		Shut down	41.	179.33			
	15		Load	213.	1.44			
	25		Pay due	44.	162.46			
	26		Load	217.	4.50			
	27			219.	14.00			
Mar	6		Shut down	223.	14.00			
	8		Pay due	44.	25.75			
			Load	45.	103.55			
	9		Load	225.	22.07			
	21			229.	7.74			
					2.50			
	22			231.	33.42			
	23		Pay due	45.	39.05			
			Load	231.	510.53			
April	5			237.	111.29			
	8		Pay due	46.	9.70			
	10		Shut down		566			
	12		Load	241.	4.65			
					2150.00			
	23		Pay due	47.	54.74			
	26		Load	243.	113.00			
May	9		Pay due	409.	130.53			
May 30	11		Shut down	499.	29.44			
	27		Pay due		309.69			
	27		Load	251.	2.55			
June	7			255.	111.53			
			Pay due	504.	99.43			
	12		Shut down	51.	211.42			
	14		Load	267.	257.24			
	17			269.	176			
	24		Pay due	514.	117.97			
July	6			521.	124.34			
	9		Shut down	53.	118.41			
	10		Load	277.	50.05			
	24		Pay due	53.	163.74			
				54.	723.55			
Aug	1		Shut down		15.45			
	2		Load	277.	50			
					1319.37			1319.37

## Spining No 7

1901	2	3	Balanced	91.53147	1901	7	By Wheelwright	604.26074
Oct	3		Ball	297.23550	Nov	13	(Balanced)	204.1403952
	7			120.47				
	12			291.420				
	23		By Wheel	57.24104				
Feb	6		Ball	59.640				
	7		By Wheel	57.11721				
	10		Wheel	57.7253				
	12		Ball	511.4445				
				511.640				
	20			513.1530				
	16		By Wheel	57.3364				
	24		Ball	513.1414				
	5			519.704				
Oct	3			521.659				
	10		Wheel	62.865				
	12		By Wheel	63.5620				
	21		Ball	62.1590				
	23			63.15696				
	29			527.912				
Nov	1			541.737				
	6			543.540				
	7			1564				
				335.173				
				85809.25				
	8			337.330				
	11		By Wheel	65.14134				
	12		Wheel	66.1443				
	14		Ball	529.140				
				04				
	15			341.12512				
	22			344.594				
	23		By Wheel	69.13243				
	27		Ball	445.77				
Dec	5			457.171377				
	9		By Wheel	704.7162				
	11		Wheel	714.7194				
			Ball	357.15620				
				350.75				
	14			353.2149				
	21		By Wheel	71.1253				
	23		Ball	157.104				
				120				
				2300.42				

15300.52

## Mill Machinery No 5

1901	17	3	Ball	558.3578	1901	31	By Balanced	604.71
Feb	27		By Wheelwright	112.400.00				
May	9		Ball	436.940				
	31		By Wheel	114.159.92				
				664.71				604.71
1901	1	3	Balanced	604.71	June	6	By ant for	84.4217.50
April	12		Ball	553.6500				
				5.435				
				5.344				
	19			57.343.22				
				59.173				
				5.140				
	30			64.210.94				
May	1		By Wheel	143.172.25				
	2		Ball	65.215				
				5.316.40				
	11			67.271.45				
				2.244				
	14			67.277				
	17			71.243.00				
				110				
				19.43				
				11.40				
	18			5.42				
				74.2430				
	19			5.74				
				75.8560				
				811.447				
				94				
	21			24.45				
	23			77.353				
				2.62				
				44.21				
				34.11				
	24			77.244.72				
				79.217.3				
				12.60				
				12.00				
	25			79.242.77				
				79.44				
	29			5.40				
June	2		By Wheel	15.2250				
	6		Ball	15.204.01				
				2.24.50				
				42.17.50				

# Misc Machinery

1970	June	6	By Amos Ford	427.00	1970	July	31	By Amos Ford	1352.19
	12		Bal	7.8					
				60					
				171.50					
				14.45					
				20.10					
				323.54					
				135.59					
				164.91					
				44.19					
				122.72					
				212.9					
				1.99					
				16.74					
				9.44					
		14	By Amos Ford	15.0					
		19	Stewchem	2.2					
		21	Bal	98.0					
				20.25					
				9.72					
				5.75					
				5.44					
		22		56.49					
				13.50					
				8.25					
				41.41					
		26		139.24					
		29		1.45					
		30		99.0					
				125.73					
				253.204					
July	6	By Amos Ford	7.8	34.99					
	12	Bal	101.0	6.65					
	13		104.0	14.14					
		By Amos Ford	17.2	170.52					
	16	Bal	105.0	11.74					
	20		29.51						
			3.55						
	21	Stewchem	17.8	1.0					
	23	Bal	105.0	17.62					
			107.0	441.46					
	25		52.54						
	27		109.2	7.71					
	28		90.09						
			3	270.62					
				1342.19					

1352.19

# Misc Machinery

1970	July	31	By Amos Ford	94	1326.19	1970	Aug	14	By Amos Ford	96	2149.79
			Bal	109.0	50.65						
				142.22							
				111.0	1.59						
				118.0	106.15						
				9.00							
				194.40							
				115.0	275.96						
				55.74							
				1.56							
				2.50							
				11.03							
				20.0	443.46						
				21.2	659.41						
				117.0	12.29						
				9.10							
				165.30							
				119.0	450.24						
				115.59							
				20.46							
				1.05							
				0.05							
				99.20							
				134.91							
				67.16							
				667.14							
				231.05							
				105.00							
				46.97							
				16.59							
				26.65							
				19.2							
				669.34							
				2.25							
				2.43							
				6.24							
				7.92							
				544.74							
				205.25							
				17.55							
				203.44							
				39.1							
				544.97							
				9.15							
				52.74							
				2149.79							

2149.79

## Mill Machinery

1998	14	25	Coms. fed	95	21119.79	1998	25	Coms. fed	174	335070	15
1998	17	25	Shut down	25	1647.74						
1998	20		Good	158	497.47						
1998	21		By Hand	242	1039.19						
1998	25		Good	147	15496						
				2	112.19						
				131	2462						
				139	51939						
				2	3536						
	26			2	220						
	27			2	2638						
				141	257						
	29			2	3375						
				2	6000						
				2	227						
1998	4			145	22						
				2	22072						
				2	435						
				2	2650						
				2	24630						
	5		By Hand	242	122271						
	10		Good	145	625						
	12			145	58						
				2	31344						
				147	17000						
				2	247						
				2	9960						
				2	686						
				2	5279						
				2	66						
				149	30						
				149	10000						
				2	1396						
				2	3377						
				2	1006						
				2	7200						
				151	212						
	16			2	500000						
				2	242						
				2	64199						
	19			2	5250						
	20			151	30525						
				2	3060						
				2	6167						
				2	3347010						

## W. B. Potter, Low 40+ 1225 hours by hand

1998	12	27	Good	35	1417.41	1998	22	By Hand	35	1417.41
1998	20	27	Good 7.5	61	244422	1998	31	By Hand	15	5570.66
1998	23			71	130592					
1998	24			71	2646.55					
1998	25			71	3221.94					
1998	26			71	1373.30					
1998	27			71	1345.27					
1998	28			71	1304.76					
1998	29			71	1340.38					
1998	30			71	12796.04					
1998	31			71	1412.18					
1998	1			71	1523.52					
1998	2			71	1341.22					
1998	3			71	1044.43					
1998	4			71	1376.98					
1998	5			71	1542.97					
1998	6			71	1695.74					
1998	7			71	1116.50					
1998	8			71	2227.50					
1998	9			71	1057.73					
1998	10			71	55370.66					
1998	11			71	13576					
1998	12			71	132.04					
1998	13			71	965.64					
1998	14			71	965.64					
1998	15			71	965.64					
1998	16			71	965.64					
1998	17			71	965.64					
1998	18			71	965.64					
1998	19			71	965.64					
1998	20			71	965.64					
1998	21			71	965.64					
1998	22			71	965.64					
1998	23			71	965.64					
1998	24			71	965.64					
1998	25			71	965.64					
1998	26			71	965.64					
1998	27			71	965.64					
1998	28			71	965.64					
1998	29			71	965.64					
1998	30			71	965.64					
1998	31			71	965.64					



*Elizabeth Stone*

1898 July	4	To bank	27.4257600	1898 July	4	By bank interest	10.4257600
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*Daniel J. Curran*

1898 July	4	To bank	27.441400	1898 July	4	By bank interest	10.441400
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*Wm. F. Curran (A.C.)*

1898 July	4	To bank	27.729260	1898 July	4	By bank interest	10.729260
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*William Washington Pl.* 4500 3200 1000

1898 June	15	To bank	91.40000	1898 July	5	By bank interest	22.45000
Aug	31		127.5000				45000
			45000				45000

*W. J. Carlin (A.C.)* 5000 3200 1000

1898 June	22	To bank	16.40000	1898 July	4	By bank interest	22.9532
July	19	bank	155.4500				9532
			9532				9532

*John W. Bloni*

1898 July	22	To bank	25.790000	1898 July	22	By bank interest	9.790000
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*Serrantheus Herbert*

1898 July	22	To bank	25.134000	1898 July	22	By bank interest	9.134000
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*John W. Bloni (A.C.)*

1898 July	22	To bank	25.157000	1898 July	22	By bank interest	9.157000
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*Stewart Smith*

1898 July	4	To bank	27.1270200	1898 July	4	By bank interest	10.1270200
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*Sarah H. Berger*

1898 July	4	To bank	27.974519	1898 July	4	By bank interest	10.974519
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Apr 1/1900 Pk

Gustave J. Schmitz

Trinity, Chicago, Ill.

1899	June 30	2, Accummng AP	2. 200 00	1899	June 15	By bank	2. 200 00
July 1	1		4. 100 00	July 31	By	10	100 00
Aug 2	2		6. 100 00	Aug 30		14	100 00
Nov 2	2		1. 50 00	Nov 19		20	50 00
1900			250 00				250 00
Aug 10	2, Accummng AP	19. 100 00		1900	July 31	By bank	106. 100 00
Dec 15		31. 50 00		Dec 14		17. 50 00	
Jan 15		37. 50 00		Jan 14		19. 50 00	
Feb 15		41. 50 00		Feb 15		210. 50 00	
		250 00					250 00

Edgar S. Cook

Apr 1/1900 Pk  
Potterton Pa

1899	June 30	2, Accummng AP	1. 200 00	1899	June 24	By bank	2. 200 00
July 1	1		3. 50 00	Aug 27		10. 150 00	
Oct 2	2		5. 50 00				150 00
Nov 2	2		7. 50 00				150 00
1900			150 00	1900	Aug 15	By bank	116. 100 00
Aug 10	2, Accummng AP	19. 100 00		Dec 14		75. 150 00	
Dec 15		31. 50 00					250 00
Jan 15		37. 50 00					
Feb 15		41. 50 00					
		250 00					

Apr 1/1900 Pk

Luther J. Bent

Trinity, Chicago, Ill.

1899	June 30	2, Accummng AP	1. 400 00	1899	June 15	By bank	2. 400 00
July 1	1		3. 200 00	July 15		12. 400 00	
Aug 2	2		5. 200 00	Aug 3		20. 200 00	
Nov 2	2		7. 200 00				600 00
1900			600 00	1900	Aug 10	2, Accummng AP	17. 50 00
Aug 10	2, Accummng AP	17. 50 00		Dec 15		30. 150 00	
Dec 15		30. 150 00		Jan 15		36. 150 00	
Jan 15		36. 150 00		Feb 15		41. 150 00	
Feb 15		41. 150 00					750 00
Aug 1	2, Accummng AP	55. 120 00		Aug 16	By bank	32. 50 00	
Sept 16		60. 120 00		Dec 5		34. 120 00	
Nov 15		67. 120 00		1900	Jan 15	37. 120 00	
Dec 15		75. 120 00		Feb 15	By	76. 120 00	
1900			1250 00				6050 00
			6050 00				6050 00
Dec 11	2, Accp 84 Sub 122	1250 00		Apr 1	By Balance		1250 00

Edmund J. Schmitz

NW Cor 10th &amp; Chestnut St

Chicago, Ill.

1899	June 30	2, Accummng AP	2. 500 00	1899	June 24	By bank	2. 500 00
July 1	1		4. 250 00	July 1		12. 250 00	
Oct 2	2		6. 250 00	Aug 20		12. 500 00	
Nov 2	2		8. 250 00				750 00
1900			750 00				

Orig. Oct 17 1900

James Gayley *Distilling Co*

1899	1899	1899	1899	1899	1899
June 30	2, Ammuns, 90	1.1 100.00	July 12	2, bnd	2. 100.00
July 1		4. 500.00	July 6		12. 500.00
Aug 2		6. 500.00	Aug 3		16. 500.00
Nov 1		7. 500.00	Nov 26		500.00
		1500.00			1500.00
1900			1900		
Jan 10	2, Ammuns, 90	19. 100.00	Jan 1	2, bnd	112. 100.00
Feb 15		30. 500.00	Feb 6		74. 100.00
Mar 15		36. 500.00	Mar 23		250. 500.00
July 15		12. 500.00			2000.00
		2500.00			

Rufus H. Wood

Oct 18 1900

Hamm &amp; Co. New

1899	1899	1899	1899	1899	1899
June 30	2, Ammuns, 90	2. 200.00	July 24	2, bnd	2. 200.00
July 1		5. 100.00	July 1		12. 100.00
Aug 2		7. 100.00	Aug 3		16. 100.00
Nov 1		1. 100.00	Nov 15		20. 100.00
		300.00			300.00
1900			1900		
Jan 10	2, Ammuns, 90	20. 200.00	Jan 22	2, bnd	112. 200.00
Feb 15		32. 100.00	Feb 15		140. 100.00
Mar 15		35. 100.00	Mar 25		214. 200.00
July 15		43. 100.00			500.00
		500.00			

July 29 1900

J. Lewis Thomas 100 Wilson St. New York

1899	1899	1899	1899	1899	1899
June 30	2, Ammuns, 90	2. 200.00	July 24	2, bnd	2. 200.00
July 1		4. 100.00	July 1		12. 100.00
Aug 2		6. 100.00	Aug 3		16. 100.00
Nov 1		1. 100.00	Nov 15		20. 100.00
		300.00			300.00
1900			1900		
Jan 10	2, Ammuns, 90	20. 200.00	Jan 22	2, bnd	112. 200.00
Feb 15		32. 100.00	Feb 15		140. 100.00
Mar 15		35. 100.00	Mar 25		214. 200.00
July 15		43. 100.00			500.00
		500.00			

Chester R. Beard

Buckley, Building, New

1899	1899	1899	1899	1899	1899
June 30	2, Ammuns, 90	1. 200.00	July 24	2, bnd	2. 200.00
July 1		3. 140.00	July 1		12. 100.00
Aug 2		5. 500.00	Aug 3		20. 500.00
Nov 1		5. 190.00			500.00
		7. 140.00			
		540.00			
1900			1900		
Jan 10	2, Ammuns, 90	15. 300.00	Jan 22	2, bnd	106. 300.00



June 4/1900

Henry L. Townsend

420 Chestnut St, Phila

1899	30	3/2 Acumms, Apd	20	5000 00	1899	June 23	By Cash	20	5000 00
July 1	.	.	4	5000 00	July 1	.	.	12	4000 00
Aug 1	.	.	6	5000 00	Aug 1	.	.	16	4000 00
Aug 1	.	.	12	5000 00	Aug 1	.	.	16	4000 00
1900	.	.	20	5000 00	1900	.	.	12000 00	
1900	Aug 10	3/2 Acumms, Apd	20	5000 00	1900	Aug 10	By Cash	114	5000 00
Aug 15	.	.	32	5000 00	Aug 17	.	.	74	4000 00
Aug 15	.	.	34	5000 00	Aug 21	.	.	196	5000 00
Aug 15	.	.	48	5000 00	Aug 21	.	.	214	5000 00
Aug 15	.	.	20000 00		Aug 21	.	.	20000 00	

June 13/1900

B. J. Townsend Jr.

420 Chestnut St, Phila

1899	June 30	3/2 Accumms, Apd	20	2000 00	1899	June 23	By Bond	20	2000 00
July 1	1	"	4	1000 00	July 1	1	"	10	1000 00
Aug 1	1	"	6	1000 00	Aug 1	1	"	16	1000 00
Aug 1	1	"	12	1000 00	Aug 1	1	"	16	1000 00
			20	2000 00				114	2000 00
1900	Aug 10	3/2 Accumms, Apd	20	2000 00	1900	Aug 11	By Bond	114	2000 00
Aug 15	1	"	32	2000 00	Aug 17	1	"	74	2000 00
Aug 15	1	"	34	2000 00				196	2000 00
Aug 15	1	"	48	2000 00				214	2000 00
			5000 00					5000 00	

Henry Van Beil

June 4/1900

420 Chestnut St, Phila

1899	30 3/2 Accumms, Apd	20 2000 00	1899	23 By Cash	20 2000 00
July 1		5 1000 00	Aug 1		10 1000 00
Aug 1		6 1000 00	Aug 1		16 1000 00
Aug 1		12 1000 00	Aug 1		16 1000 00
1900		20 2000 00	1900		114 2000 00
Aug 10 3/2 Accumms, Apd		20 2000 00	Aug 10 By Cash		114 2000 00
Aug 15		32 2000 00	Aug 17		74 2000 00
Aug 15		34 2000 00	Aug 21		196 2000 00
Aug 15		48 2000 00	Aug 21		214 2000 00
Aug 15		5000 00			5000 00

W. D. Frickmuth

June 13/1900

420 Chestnut St, Phila

1898	June 30	3/2 Accumms, Crd	1 5000 00	1899	June 23	By Cash	1 5000 00
July 1	1	"	4 1000 00	July 1	14	"	14 1000 00
Aug 1	2	"	6 1000 00				
Aug 1	2	"	7 5000 00				
1900	Aug 10	3/2 Accumms, Crd	19 2000 00	1900	Aug 10	By Cash	114 2000 00
Aug 15	15	"	30 1000 00	Aug 15	15	"	74 2000 00
Aug 15	15	"	36 1000 00				
Aug 15	15	"	42 1000 00				
			5000 00				
Aug 1	1	3/2 Accumms, Crd	54 1200 00	1901	Aug 5	By Cash	44 1200 00
Aug 1	16	"	60 1200 00	Aug 4	4	"	122 1200 00
Aug 15	15	"	67 1200 00	1901	Aug 1	"	570 1200 00
Aug 15	15	"	75 1200 00			By Drawing of Green	76 1250 00
Aug 1	31	Balance	1250 00				
			6250 00				
Aug 1	31	2 1/2 By Cash and	126 1250 00	1901	Aug 1	By Balance	1250 00

*L. Boyd Carrigan* Shintu River China

1999 June	30	3/4 Ammunition	1	2000.00	1999 June	22	By Cash	2	2000.00
July	1		5	1000.00	July	11		12	1000.00
Aug	2		5	1000.00	Aug	30		30	2000.00
Nov	2		7	1000.00					3000.00
				3000.00					3000.00

*L. E. Wray*

July 1904

50 (medium) and 70

1999 June	30	3/4 Ammunition	2	1500.00	1999 June	25	By Cash	2	1000.00
July	1		5	500.00	July	1		12	500.00
Aug	2		6	500.00	Aug	10		20	1000.00
Nov	2		2	500.00					1500.00
				1500.00					1500.00
1900 Aug	10	3/4 Ammunition	20	1000.00	1901 July	17	By Cash	50	2500.00
Nov	15		32	500.00					2500.00
Dec	15		3	500.00					
Jan	15		40	500.00					
Feb	15			2500.00					
				2500.00					2500.00

*V. H. Bonkle*

1900 China

309 Shindu River China

1999 June	30	3/4 Ammunition	1	1000.00	1999 June	23	By Cash	2	1000.00
July	1		3	500.00	July	1		12	500.00
Aug	2		5	500.00	Aug	1		20	1000.00
Nov	2		7	500.00					1500.00
				1500.00					1500.00

*Mahlon L. Campbell*

July 1904

50 (medium) and 70

1999 June	30	3/4 Ammunition	1	1000.00	1999 June	25	By Cash	2	1000.00
July	1		3	500.00	July	6		12	500.00
Aug	2		5	500.00	Aug	20		16	1000.00
Nov	2		7	500.00					1500.00
				1500.00					1500.00
1900 Aug	10	3/4 Ammunition	10	1000.00	1900 Aug	31	By Cash	12	1000.00
Nov	15		50	500.00	Nov	14		10	500.00
Dec	15		36	500.00	Dec	21		19	500.00
Jan	15		41	500.00	Jan	15		12	500.00
Feb	15			2500.00					2500.00
				2500.00					2500.00

S. J. Shanbacher 420 Chestnut St, Phila

1899	June 30	3/4 Accumm, apd	2-10000 00	1899	June 23	by bank	2-10000 00
July	1		4-10000 00	Aug 31			5000 00
Aug	2		6-10000 00	Oct 10			6000 00
Nov	2		8-10000 00				9000 00
			9000 00				
1899	Aug 10	3/4 Accumm, apd	20-10000 00	1899	Aug 11	by bank	11-4000 00
Dec	15		31-10000 00	Aug 24			112-4000 00
1899	15		37-10000 00	1899	17		174-4000 00
1899	15		43-10000 00	1899	22	Handwritten	17-4000 00
				1899	16	bank	112-4000 00
			11250 00				11250 00

C. J. Holladay 627 Walnut St

1899	June 30	3/4 Accumm, apd	1-10000 00	1899	June 25	by bank	2-10000 00
July	1		3-1000 00	July 1			12-500 00
Aug	2		5-1000 00	July 4			25-1000 00
Nov	2		7-1000 00				1500 00
			1500 00				
1899	Aug 10	3/4 Accumm, apd	1-10000 00	1899	Aug 20	by bank	11-10000 00
Dec	15		30-1000 00	1899	27		112-500 00
1899	15		36-1000 00	1899	21		196-500 00
1899	15		43-1000 00	1899	10		112-500 00
			2500 00				2500 00
1899	Aug 1	3/4 Accumm, apd	55-2350 00	1899	July 24	by bank	2-1000 150 00
Oct	16		56-1000 150 00	1899	Aug 24	by bank	100-2350 00
			60-1000 150 00	1899	17		322-2500 00
Nov	15		68-1000 150 00	1899	17		344-2500 00
			67-1000 150 00	1899	10		344-2500 00
1899	Aug 15		67-1000 150 00	1899	15		12-2500 00
1899	Aug 15		74-1000 150 00	1899	15		11900 00
1899	Aug 15		75-1000 150 00				
1899	Aug 31	Balance	147-2500 00				12500 00

Charles Page Allen Land on ground betw Phila

1899	June 30	3/4 Accumm, apd	1-20000 00	1899	June 23	by bank	2-20000 00
July	1		4-12500 00	Nov 7			20-12500 00
Aug	2		6-12500 00	Nov 27			20-12500 00
Nov	2		8-12500 00				36000 00
			16000 00				
1899	Aug 10	3/4 Accumm, apd	19-10000 00	1899	Aug 19	by bank	22-10000 00
Dec	15		31-12500 00	1899	21		9750 00
1899	15		37-12500 00	1899	10		34-12500 00
1899	15		42-12500 00	1899	17		22-12500 00
			21250 00				21250 00
1899	Aug 1	3/4 Accumm, apd	55-12500 00	1899	Oct 10	by bank	122-5000 00
Oct	16		60-12500 00	1899	17		322-4500 00
Nov	15		67-12500 00	1899	22		344-7500 00
1899	Aug 15	Accumm, apd	67-11750 00	1899	31	Endowment	6-11250 00
			12000 00	1899	15	bank	326-13500 00
			70-10000 00	1899	25		344-12500 00
1899	Aug 15		71-10000 00	1899	25	Endowment	69-12500 00
			161-5075 00	1899	15	bank	71-2000 00
				1899	19	bank	322-5000 00
			13550 00				356-7000 00
							13550 00

Wm L. O'Neill

1899	June 30	3/4 Accumm, apd	1-10000 00	1899	June 25	by bank	2-10000 00
July	1		5-1000 00	July 1			12-500 00
Aug	2		6-1000 00	July 16			16-1000 00
Nov	2		7-1000 00				1500 00
			1500 00				
1899	Aug 10	3/4 Accumm, apd	19-10000 00	1899	Aug 14	by bank	12-10000 00
Dec	15		31-10000 00	1899	11		11-500 00
1899	15		37-10000 00	1899	21		196-500 00
1899	15		42-10000 00	1899	10		112-500 00
			2500 00				2500 00
1899	Aug 1	3/4 Accumm, apd	55-2350 00	1899	Aug 3	by bank	106-2350 00
Oct	16		60-2350 00	1899	27		314-2350 00
Nov	15		67-2350 00	1899	27		344-2350 00
1899	Aug 15		75-2350 00	1899	20		174-2350 00
1899	Aug 31	Balance	2500 00	1899	17	Endowment	76-2500 00
			11900 00				11900 00
1899	Aug 31	3/4 Acc. bap. lts	122-2500 00	1899	Aug 1	by Balance	2500 00

May 1840  
Samuel Dickson

131 Ch. North St. N.Y.

1839	June 30	To Accounts apd	1,200.00	1839	June 23	By Cash	1,200.00
	July 1		500.00		July 15	By Cash	1,000.00
	Aug 2		500.00		July 20	By Cash	500.00
	Nov 2		700.00				
			1500.00				1500.00
1840	Jan 10	To Accounts apd	19,100.00	1840	Jan 13	By Cash	14,100.00
	Jan 15		500.00		Jan 10		2100.00
	Feb 15		500.00				
	July 15		410.00				2500.00
			2500.00				

J. L. Cropper

Hamming Pa

1839	June 30	To Accounts apd	1,200.00	1839	June 25	By Cash	2,200.00
	July 1		400.00		July 1		12,100.00
	Aug 2		500.00		July 16		16,200.00
	Nov 2		700.00				3500.00
			5000.00				
1840	Jan 10	To Accounts apd	19,200.00	1840	Jan 10	By Cash	14,200.00
	Jan 15		500.00		Jan 17		700.00
	Feb 15		500.00				
	July 15		420.00				3500.00
			3500.00				

May 1840  
James S. Beason

Hamming Pa

1839	June 30	To Accounts apd	1,200.00	1839	June 25	By Cash	2,200.00
	July 1		500.00		July 1		12,100.00
	Aug 2		500.00		July 16		20,200.00
	Nov 2		700.00				3500.00
			3000.00				
1840	Jan 10	To Accounts apd	19,200.00	1840	Jan 10	By Cash	14,200.00
	Jan 15		500.00		Jan 17		700.00
	Feb 15		500.00				
	July 15		410.00				3500.00
			5000.00				
	Aug 1	To Accounts apd	50,120.00		July 19	By Cash	20,120.00

B. B. Gaskill Jr

500 Ch. North St

1839	June 30	To Accounts apd	1,200.00	1839	June 25	By Cash	2,200.00
	July 1		400.00		July 1		12,100.00
	Aug 2		500.00		July 16		16,200.00
	Nov 2		700.00				3500.00
			2700.00				
1840	Jan 10	To Accounts apd	19,200.00	1840	Jan 10	By Cash	14,200.00
	Jan 15		500.00		Jan 17		700.00
	Feb 15		500.00				
	July 15		420.00				3500.00
			2000.00				



Corwin H. &amp;

(Trans) May (Main)

1893	June 10	2 <sup>d</sup> Anniversary	10	1000.00	1893	June 10	2 <sup>d</sup> Anniversary	10	500.00
July 1			4	1500.00	July 1			4	500.00
Aug 2			5	1250.00	Aug 2			5	250.00
Nov 2			7	2500.00	Nov 2			7	2500.00
				7500.00					7500.00
1894	June 10	3 <sup>d</sup> Anniversary	10	7500.00	1894	June 10	3 <sup>d</sup> Anniversary	10	500.00
July 1			30	7175.00	July 1			30	500.00
Aug 2			56	7175.00	Aug 2			56	500.00
Nov 2			42	1750.00	Nov 2			42	500.00
				10250.00					10250.00

Edmund D. Jennings

200 - black &amp; white

1893	June 10	2 <sup>d</sup> Anniversary	10	1000.00	1893	June 10	2 <sup>d</sup> Anniversary	10	1000.00
July 1			4	500.00	July 1			4	500.00
Aug 2			6	500.00	Aug 2			6	500.00
Nov 2			1	500.00	Nov 2			1	500.00
				1500.00					1500.00
1894	June 10	3 <sup>d</sup> Anniversary	10	1000.00	1894	June 10	3 <sup>d</sup> Anniversary	10	1000.00
July 1			31	500.00	July 1			31	500.00
Aug 2			37	500.00	Aug 2			37	500.00
Nov 2			42	500.00	Nov 2			42	500.00
				2500.00					2500.00

C. W. Dick

(Trans) May (Main)

1893	June 10	2 <sup>d</sup> Anniversary	10	2000.00	1893	June 10	2 <sup>d</sup> Anniversary	10	2000.00
July 1			4	1000.00	July 1			4	1000.00
Aug 2			6	1000.00	Aug 2			6	1000.00
Nov 2			7	1000.00	Nov 2			7	1000.00
				5000.00					5000.00
1894	June 10	3 <sup>d</sup> Anniversary	10	2000.00	1894	June 10	3 <sup>d</sup> Anniversary	10	2000.00
July 1			30	1000.00	July 1			30	1000.00
Aug 2			36	1000.00	Aug 2			36	1000.00
Nov 2			42	1000.00	Nov 2			42	1000.00
				5000.00					5000.00

1893	June 10	2 <sup>d</sup> Anniversary	10	1000.00	1893	June 10	2 <sup>d</sup> Anniversary	10	1000.00
July 1			4	500.00	July 1			4	500.00
Aug 2			6	500.00	Aug 2			6	500.00
Nov 2			1	500.00	Nov 2			1	500.00
				1500.00					1500.00
1894	June 10	3 <sup>d</sup> Anniversary	10	1000.00	1894	June 10	3 <sup>d</sup> Anniversary	10	1000.00
July 1			30	500.00	July 1			30	500.00
Aug 2			36	500.00	Aug 2			36	500.00
Nov 2			42	500.00	Nov 2			42	500.00
				4500.00					4500.00
1895	June 10	4 <sup>th</sup> Anniversary	10	500.00	1895	June 10	4 <sup>th</sup> Anniversary	10	500.00

James W. Walker

437 Chestnut St

[illegible]

14.4

George B. Witt Pittsburg Pa.

[illegible]

Fung Pa.

1999	30	2/2	Announcements	1999	26	2	bal	200.00	200.00
Jan	1			Apr	30	14		200.00	
Feb	1			May	15	20		100.00	
Mar	1								
Apr	1								
May	1								
Jun	1								
Jul	1								
Aug	1								
Sep	1								
Oct	1								
Nov	1								
Dec	1								
1999									
Jan	10	3/2	Announcements	1999	26	2	bal	200.00	200.00
Feb	15			Apr	30	14		200.00	
Mar	15			May	15	20		100.00	
Apr	15								
May	15								
Jun	15								
Jul	15								
Aug	15								
Sep	15								
Oct	15								
Nov	15								
Dec	15								
1999									
Jan	10	3/2	Announcements	1999	26	2	bal	200.00	200.00
Feb	15			Apr	30	14		200.00	
Mar	15			May	15	20		100.00	
Apr	15								
May	15								
Jun	15								
Jul	15								
Aug	15								
Sep	15								
Oct	15								
Nov	15								
Dec	15								
1999									
Jan	10	3/2	Announcements	1999	26	2	bal	200.00	200.00
Feb	15			Apr	30	14		200.00	
Mar	15			May	15	20		100.00	
Apr	15								
May	15								
Jun	15								
Jul	15								
Aug	15								
Sep	15								
Oct	15								
Nov	15								
Dec	15								
1999									
Jan	10	3/2	Announcements	1999	26	2	bal	200.00	200.00
Feb	15			Apr	30	14		200.00	
Mar	15			May	15	20		100.00	
Apr	15								
May	15								
Jun	15								
Jul	15								
Aug	15								
Sep	15								
Oct	15								
Nov	15								
Dec	15								
1999									
Jan	10	3/2	Announcements	1999	26	2	bal	200.00	200.00
Feb	15			Apr	30	14		200.00	
Mar	15			May	15	20		100.00	
Apr	15								
May	15								
Jun	15								
Jul	15								

Wm H. Sherman

448 Robert L.

1899	30	To Accounts, CR	2,445.00	1899	27	By Cash	2,445.00
Ch	1		4,175.00	Ch	1		2,175.00
		To W. W. Waller	5,100.00			11th	1,000.00
Per	2	Accounts, CR	6,715.00	Per	16		20,125.00
Ch	2		7,125.00	Per	4		26,250.00
			32,500.00				52,500.00
1899	10	To Accounts, CR	20,125.00	1899	10	By Cash	114,250.00
Per	15		31,125.00	Per	21		214,375.00
1899	15		37,125.00				
Per	15		42,125.00				
			62,500.00				62,500.00
Aug	20	To Balance, by	50,171.25	Aug	20	By Cash	222,112.50
Ch	22	To Accounts, CR	552,330.00	Ch	7		196,230.00
Per	22		60,423.50	Per	14		222,230.00
Per	15		97,223.50	Per	3		342,170.00
Aug	15		75,223.50			Balance, from	70,225.00
Aug	31	Balance	2,925.00			1898	19.00
			11,500.00				119.00
Apr	1	To Balance	170,250.00	1898	1	By Balance	250.00

June 1960

John P. Elkin Indianan Pa

Indiana Pa

Year	Month	Day	Description	Amount	Balance	Notes
1999	Jan	30	2 Payments	1,500.00	25	2,500.00
1999	Feb	1		4,250.00	25	2,500.00
1999	Mar	2		5,250.00	26	2,500.00
1999	Apr	2		7,250.00		2,500.00
1999	May			7,500.00		2,500.00
1999	Jun	10	2 Payments	17,500.00	24	2,500.00
1999	Jul	10		30,250.00	8	2,500.00
1999	Aug	15		36,250.00		2,500.00
1999	Sep	15		46,250.00		2,500.00
1999	Oct			12,500.00		2,500.00
1999	Nov					2,500.00
1999	Dec					2,500.00



1899  
*Conrad C. Grove* 5512 Highland St  
 1899 1899 1899

1899	June 30	To Advertising Exp	1 + 1000 00	1899	June 30	By Cash	4 + 1000 00
July 1			4 + 500 00	July 1			12 + 500 00
Aug 2			6 + 500 00	Aug 2			10 + 1000 00
Nov 2			7 + 500 00	Nov 2			1500 00
			1500 00				
1899	July 10	To Advertising Exp	19 + 1000 00	1899	Aug 21	By Cash	16 + 1000 00
Aug 15			30 + 500 00	Aug 17			70 + 500 00
Nov 15			36 + 500 00	Nov 17			14 + 500 00
Dec 15			42 + 500 00	Dec 17			21 + 500 00
			2500 00				2500 00

1899  
*John P. Mack* 542 1/2 1st St  
 1899 1899 1899

1899	June 30	To Advertising Exp	1 + 500 00	1899	June 30	By Cash	4 + 500 00
July 1			4 + 250 00	July 1			12 + 250 00
Aug 2			6 + 250 00	Aug 2			20 + 500 00
Nov 2			7 + 250 00	Nov 2			7500 00
			7500 00				
1899	July 10	To Advertising Exp	19 + 500 00	1899	Aug 21	By Cash	32 + 250 00
Aug 15			31 + 250 00	Aug 27			30 + 250 00
Nov 15			47 + 250 00	Nov 31		Balance	7500 00
Dec 15			42 + 250 00				12500 00
			12500 00				
1899	July 1	To Balance	7500 00	1899	July 1	By Cash	5 + 7500 00
			7500 00			Balance	15 + 200 00
							7500 00

1899  
*P. Hays* 901 1/2 65th St  
 1899 1899 1899

1899	June 30	To Advertising Exp	1 + 1000 00	1899	June 30	By Cash	2 + 1000 00
July 1			4 + 500 00	July 1			12 + 500 00
Aug 2			6 + 500 00	Aug 2			16 + 500 00
Nov 2			7 + 500 00	Nov 2			20 + 500 00
			1500 00				1500 00
1899	July 10	To Advertising Exp	19 + 1000 00	1899	Aug 15	By Cash	16 + 1000 00
Aug 15			31 + 500 00	Aug 15			10 + 500 00
Nov 15			37 + 500 00	Nov 15			14 + 500 00
Dec 15			42 + 500 00	Dec 15			21 + 500 00
			2500 00				2500 00

1899  
*Robert H. Stone* 1899 1899  
 1899 1899 1899

1899	June 30	To Advertising Exp	1 + 500 00	1899	June 30	By Cash	2 + 500 00
July 1			4 + 250 00	July 1			12 + 250 00
Aug 2			6 + 250 00	Aug 2			12 + 250 00
Nov 2			7 + 250 00	Nov 2			14 + 250 00
			750 00				750 00
1899	July 10	To Advertising Exp	19 + 500 00	1899	Aug 21	By Cash	16 + 500 00

Apr 19/1950

J. Wesley Supplies 2<sup>nd</sup> Whitcomb

1949	June 30	2 <sup>nd</sup> Anniversary	2	1,500.00	1949	June 30	2 <sup>nd</sup> Anniversary	2	1,500.00
July 1			4	1,500.00	July 1			4	1,500.00
July 2			6	1,500.00	July 2			6	1,500.00
July 3			8	1,500.00	July 3			8	1,500.00
July 4				7,500.00	July 4				7,500.00
July 5			10	1,500.00	July 5			10	1,500.00
July 6			15	1,500.00	July 6			15	1,500.00
July 7			17	1,500.00	July 7			17	1,500.00
July 8			25	1,500.00	July 8			25	1,500.00
				12,500.00					12,500.00

Mr. B. Patton 24 (Home Day)

1949	June 30	2 <sup>nd</sup> Anniversary	1	1,000.00	1949	June 30	2 <sup>nd</sup> Anniversary	1	1,000.00
July 1			4	1,500.00	July 1			4	1,500.00
July 2			6	1,500.00	July 2			6	1,500.00
July 3			8	1,500.00	July 3			8	1,500.00
				1500.00					1500.00

Apr 19/1950

C. I. Swamp Beach &amp; Presale Store

1949	June 30	2 <sup>nd</sup> Anniversary	1	2,000.00	1949	June 30	2 <sup>nd</sup> Anniversary	1	2,000.00
July 1			5	1,000.00	July 1			5	1,000.00
July 2			5	1,000.00	July 2			5	1,000.00
July 3			7	1,000.00	July 3			7	1,000.00
July 4				5000.00	July 4				5000.00
July 5			10	2,000.00	July 5			10	2,000.00
July 6			15	1,000.00	July 6			15	1,000.00
July 7			15	1,000.00	July 7			15	1,000.00
July 8			15	1,000.00	July 8			15	1,000.00
				5000.00					5000.00

J. Bell (Antenna) (Home Day)

1949	June 30	2 <sup>nd</sup> Anniversary	1	1,000.00	1949	June 30	2 <sup>nd</sup> Anniversary	1	1,000.00
July 1			5	500.00	July 1			5	500.00
July 2			5	500.00	July 2			5	500.00
July 3			7	500.00	July 3			7	500.00
July 4				1500.00	July 4				1500.00
July 5			10	1,000.00	July 5			10	1,000.00
July 6			15	500.00	July 6			15	500.00
July 7			15	500.00	July 7			15	500.00
July 8			15	500.00	July 8			15	500.00
				2500.00					2500.00

Aug 9/1900

Jacob J. Seeds 1158 Hunt St. Minn

1899	June 30	To Assumung CP	2000.00	1899	July 6	By Cash	1000.00
July 1			400.00	July 15			1000.00
July 2			600.00	July 15			500.00
July 2			500.00				1500.00
1900	Aug 10	To Assumung CP	2000.00	1900	Aug 22	By Cash	1000.00
Aug 15			500.00	Aug 27			1000.00
Aug 15			500.00	Aug 10			500.00
Aug 15			400.00				2500.00

Heron J. Evans

Minneapolis

1899	June 30	To Assumung CP	1000.00	1899	June 30	By Cash	2000.00
July 1			2000.00	July 14			1000.00
July 1			5000.00	July 30	By Cash	1400.00	2000.00
July 2			5000.00	Aug 15			2000.00
July 2			7000.00				5000.00
1900	Aug 10	To Assumung CP	1000.00	1900	Aug 9	By Cash	1400.00

Aug 9/1900

George B. Davies 1158 Hunt St. Minn

1899	June 30	To Assumung CP	1000.00	1899	July 14	By Cash	2000.00
July 1			500.00	July 30			1000.00
July 2			500.00	July 31			1000.00
July 2			7000.00	Aug 15			2000.00
1900	Aug 10	To Assumung CP	1000.00	1900	Aug 15	By Cash	1000.00
Aug 15			500.00	Aug 20			500.00
Aug 15			500.00				500.00
Aug 15			400.00				500.00

George B. Hagner

Minneapolis

1899	June 30	To Assumung CP	1000.00	1899	July 14	By Cash	2000.00
July 1			400.00	July 30			1000.00
July 2			600.00	July 31			1000.00
July 2			7000.00	Aug 15			2000.00
1900	Aug 10	To Assumung CP	1000.00	1900	Aug 17	By Cash	1000.00
Aug 15			500.00	Aug 20			500.00
Aug 15			500.00				500.00
Aug 15			400.00				500.00

J. H. Jardine

1899

Alameda

1899	June 30	2 <sup>nd</sup> Anniversary	200 00	1899	July 12	of New York	5	100 00
					14	bank	14	100 00
			200 00					200 00
July	1	2 <sup>nd</sup> Anniversary	4 1/2 50 00	July	30	of bank	14	50 00
Aug	2		6 1/2 50 00	Aug	31		14	50 00
Sept	2		4 1/2 50 00	Sept	15		20	50 00
			150 00					150 00
1900	Aug 10	2 <sup>nd</sup> Anniversary	19 1/2 100 00	Aug	19	of bank	150	100 00
Sept	15		31 1/2 50 00	Sept	19		120	150 00
Oct	15		47 1/2 50 00					
Nov	15		42 1/2 50 00					250 00
			250 00					

E. J. Porter

1899

San Francisco, Cal.

1899	June 30	2 <sup>nd</sup> Anniversary	2 1000 00	1899	Aug 24	of bank	10	2000 00
July	1		4 1/2 500 00	Aug	16		20	500 00
Aug	2		6 1/2 500 00					
Sept	2		4 1/2 500 00					2500 00
			2500 00					
1900	Aug 10	2 <sup>nd</sup> Anniversary	19 1/2 1000 00	1901	Aug 10	of bank	44	2500 00
Sept	15		31 1/2 500 00					
Oct	15		47 1/2 500 00					
Nov	15		42 1/2 500 00					2500 00
			2500 00					

W. D. Pilling

2000

1899	June 30	2 <sup>nd</sup> Anniversary	2 12000 00	1899	June 30	of bank	2	1205 00
				July	14	bank	4	795 00
			2000 00					2000 00
July	1	2 <sup>nd</sup> Anniversary	5 1/2 1000 00	July	30	of bank	14	2000 00
Aug	2		7 1/2 1000 00	Aug	15		20	1000 00
Sept	2		4 1/2 1000 00					3000 00
			3000 00					
1900	Aug 10	2 <sup>nd</sup> Anniversary	19 12000 00	Aug	9	of bank	14	2000 00

Joseph E. Shroff

San Francisco

1899	June 30	2 <sup>nd</sup> Anniversary	2 12000 00	1899	June 30	of bank	11	5000 00
July	1		4 1/2 1000 00					
Aug	2		6 1/2 1000 00					5000 00
Sept	2		4 1/2 1000 00					
			5000 00					

J. W. Gemmell

15th Sept 1891

1891	12	to Accounting	4	1000 00	1891	12	by bank	4	1000 00
1891	1	to Accounting	4	1000 00	1891	11	by bank	12	1000 00
1891	2	to Accounting	6	1000 00	1891	27	by bank	54	1000 00
1891	2	to Accounting	5	1000 00				6000 00	
1891	10	to Accounting	20	1000 00	1891	7	by bank	17	5000 00
1891	15	to Accounting	32	1000 00	1891	1	by bank	22	2000 00
1891	15	to Accounting	54	1000 00	1891	7	by bank	140	1000 00
1891	15	to Accounting	42	1000 00				10000 00	

March 14/1892

John W. Gemmell

1891	12	to Accounting	4	1000 00	1891	12	by bank	4	1000 00
1891	1	to Accounting	4	1000 00	1891	27	by bank	10	1500 00
1891	2	to Accounting	6	1000 00				1500 00	
1891	2	to Accounting	5	1000 00				1500 00	
1891	10	to Accounting	20	1000 00	1891	31	by bank	102	1000 00
1891	15	to Accounting	32	1000 00	1891	14	by bank	176	1500 00
1891	15	to Accounting	54	1000 00				2500 00	
1891	15	to Accounting	42	1000 00				2500 00	

J. Davis Hill

18th Sept 1891

1891	1	to Accounting	4	1000 00	1891	12	by bank	10	1500 00
1891	2	to Accounting	6	1000 00				1500 00	
1891	2	to Accounting	5	1000 00				1500 00	
1891	10	to Accounting	20	1000 00	1891	1	by bank	112	1000 00
1891	15	to Accounting	32	1000 00	1891	1	by bank	176	5000 00
1891	15	to Accounting	54	1000 00	1891	12	by bank	140	1000 00
1891	15	to Accounting	42	1000 00				2500 00	

Matthew W. Sparks

18th Sept 1891

1891	1	to Accounting	4	1000 00	1891	12	by bank	10	1500 00
1891	2	to Accounting	6	1000 00	1891	11	by bank	16	5000 00
1891	2	to Accounting	5	1000 00	1891	16	by bank	20	5000 00
1891	10	to Accounting	20	1000 00	1891	14	by bank	144	1500 00
1891	15	to Accounting	32	1000 00	1891	19	by bank	196	1000 00
1891	15	to Accounting	54	1000 00				2500 00	
1891	15	to Accounting	42	1000 00				2500 00	



April 1/1900 20  
 William H. S. Bateman

1900	1900	1900	1900
May 10	2 By Amusement 90	4 1/2 50 00	May 10 50 00
May 15		15 1/2 100 00	May 14 50 00
May 15		30 1/2 50 00	May 14 50 00
May 15		36 1/2 50 00	May 14 50 00
May 15		41 1/2 50 00	May 14 50 00
		250 00	250 00

May 22 1900 20  
 Mr. W. Lippert (1516 General Avenue)

1900	1900	1900	1900
May 10	2 By W. Lippert 10. 7500 00	May 10 50 00	May 10 50 00
May 15		19 1/2 5000 00	May 15 50 00
May 15		31 1/2 2500 00	May 15 250 7500 00
May 15		37 1/2 2500 00	
May 15		42 1/2 2500 00	
		12500 00	12500 00

July 1/1900 60  
 W. H. D. D. D. (400 West Clayton Street)

1900	1900	1900	1900
May 11	2 By Amusement 90	11 1/2 105 00	May 11 50 00
May 15		15 1/2 2000 00	May 10 100 00
May 15		30 1/2 1000 00	May 15 1000 00
May 15		36 1/2 1000 00	May 15 1000 00
May 15		41 1/2 1000 00	May 15 1000 00
		5000 00	5000 00

June 2/1900 20  
 Enoch S. Rogers (1711 Stephens Street)

1900	1900	1900	1900
May 10	2 By Amusement 90	19 1/2 5000 00	May 10 500 00
May 15		31 1/2 2500 00	May 17 700 7500 00
May 15		37 1/2 2500 00	
May 15		42 1/2 2500 00	
		12500 00	12500 00

June 23/90

June 23 1890  
June 18 1890

James L. Walston 1434 Walnut St. Kansas

Aug 10	3	Assessment	203/1000 00	July 23	by bank	104/1000 00
Dec 15			324/500 00	Jan 15	by bank	324/500 00
Feb 15			364/500 00			
July 15			414/500 00			
			2500 00			2500 00
Aug 1	3	Assessment	554/1200 00	July 22	by bank	242/600 00
Dec 15			564/600 00	Aug 1	by bank	594/2400 00
Feb 15			604/1200 00	Aug 24	by bank	320/2400 00
July 15			674/1200 00		Assessment	64/1250 00
Aug 15			754/1200 00			
Dec 31		Assessment	6650 00			6650 00
			6650 00			6650 00
Dec 31	3	Assessment	124/1250 00	April 1	by bank	1250 00

Alfred C. Harvey

June 23 1890  
June 18 1890

226 S. Main St. Kansas

Aug 10	3	Assessment	194/1000 00	July 22	by bank	114/1000 00
Dec 15			304/500 00	Jan 15	by bank	744/500 00
Feb 15			364/500 00	Aug 1	by bank	144/500 00
July 15			424/500 00	Aug 5	by bank	204/500 00
			2500 00			2500 00

Frank W. Bendish 12th &amp; Broadway St. Kansas

Aug 10	3	Assessment	154/1000 00	July 4	by bank	114/1000 00
Dec 15			304/500 00	Jan 15	by bank	174/1500 00
Feb 15			364/500 00			
July 15			414/500 00			
			2500 00			2500 00
Aug 1	3	Assessment	544/600 00	July 1	by bank	244/600 00

Joseph D. Bortman (Highway &amp; Lawrence St.)

June 23 1890  
June 18 1890

12th &amp; Broadway St. Kansas

Aug 10	3	Assessment	144/5000 00	July 2	by bank	114/5000 00
Dec 15			304/2500 00	Jan 15	by bank	144/7500 00
Feb 15			364/2500 00			
July 15			414/2500 00			
			12500 00			12500 00
Aug 1	3	Assessment	564/3900 00	July 25	by bank	224/3900 00

Clarence D. Lenceman 130 Walnut St. New

1000 Aug	10 To Accounts, 99	20 1000 00	1000 Aug	10 To bank	12 1000 00
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Edward B. Allen

[illegible]

W. W. Abbott 15 Carpenter St. New York

1945	10	2 <sup>nd</sup> Accounting	200	144,500.00	1945	11	2 <sup>nd</sup> Ac	200	144,500.00
1946	10	"	"	304,500.00	1946	11	"	"	174,500.00
1947	10	"	"	364,500.00	1947	11	"	"	174,500.00
1948	10	"	"	414,500.00					
				1,570.00					1,570.00
1949	1	2 <sup>nd</sup> Accounting	400	564,500.00	1949	11	2 <sup>nd</sup> Ac	200	564,500.00
1950	10	"	"	604,500.00	1950	11	"	"	524,500.00
1951	10	"	"	664,500.00					
1952	10	"	"	744,500.00					
				1,280.00					1,280.00

Wm H. Carpenter, of Union Trust Bank, St. Paul

1900	10	37	Assessing Exp	12 3/4	1500 00	1900	10	31	Ch. Paid	15 1/2	1500 00
Dec	15	"	"	30 1/4	500 00	Dec	15	"	"	17 1/2	1500 00
1900	15	"	"	36 1/4	500 00						
1900	15	"	"	41 1/4	500 00						
				2500 00						2500 00	

O. &amp; L. 25/1/1900

Jan 11 1870  
42 12 1870  
20 3 570

C. &amp; L. 25/1/1900

1900	10	2. Annunzio	19	4. 1500 00	1900	10	2. Annunzio	19	4. 1500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	42	4. 500 00	1900	15	"	42	4. 500 00
				2500 00					2500 00

Howard L. Evans 1330 Church St. N.Y.

1900	10	2. Annunzio	19	4. 1500 00	1900	10	2. Annunzio	19	4. 1500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	42	4. 500 00	1900	15	"	42	4. 500 00
				5000 00					5000 00
1900	10	2. Annunzio	19	4. 1500 00	1900	10	2. Annunzio	19	4. 1500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	42	4. 500 00	1900	15	"	42	4. 500 00
				1250 00					1250 00
1900	10	2. Annunzio	19	4. 1500 00	1900	10	2. Annunzio	19	4. 1500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	42	4. 500 00	1900	15	"	42	4. 500 00
				6050 00					6050 00
1900	10	2. Annunzio	19	4. 1500 00	1900	10	2. Annunzio	19	4. 1500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	42	4. 500 00	1900	15	"	42	4. 500 00
				1250 00					1250 00

O. &amp; L. 25/1/1900

Jan 11 1870  
42 12 1870  
20 3 570

Howard L. Evans 1330 Church St. N.Y.

1900	10	2. Annunzio	19	4. 1500 00	1900	10	2. Annunzio	19	4. 1500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	42	4. 500 00	1900	15	"	42	4. 500 00
				1250 00					1250 00

Howard L. Evans 1330 Church St. N.Y.

1900	10	2. Annunzio	19	4. 1500 00	1900	10	2. Annunzio	19	4. 1500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	30	4. 500 00	1900	15	"	30	4. 500 00
1900	15	"	42	4. 500 00	1900	15	"	42	4. 500 00
				1250 00					1250 00

6th Nov 1907

10th June 1908  
Sun 7

John P. Mathew 1028 Plumtree Hill

1908 Aug 10	2 1/2 Annamys sp	19 4 1500 00	1908 Aug 24	by hand	20 4 1500 00
15	"	51 4 750 00	25	"	20 4 1250 00
15	"	57 4 750 00			
15	"	42 4 750 00			
		5750 00			5750 00
Aug 1	2 1/2 Annamys sp	56 4 700 00	26	by hand	20 4 5750 00
			30	"	2500 00
		700 00			700 00

Alfred D. Miller 1420 Plumtree Hill

1908 Aug 10	2 1/2 Annamys sp	19 4 1000 00	1908 Aug 1	by hand	27 4 500 00
15	"	51 4 250 00	9	by hand	11 4 1250 00
15	"	57 4 250 00			
15	"	42 4 250 00			
		1750 00			1750 00

6th June 1908

Sun 7

Emma W. F. Page

1908 Aug 10	2 1/2 Annamys sp	19 4 750 00	1908 Aug 12	by hand	17 4 750 00
15	"	51 4 750 00	21	"	22 4 750 00
15	"	57 4 750 00	10	"	25 4 750 00
15	"	42 4 750 00			
		16750 00			16750 00

Henry R. Kilmack 1420 Plumtree Hill

1908 Aug 10	2 1/2 Annamys sp	19 4 400 00	1908 Aug 10	by hand	11 4 400 00
15	"	51 4 200 00	29	"	20 4 200 00
15	"	57 4 200 00	18	"	21 4 200 00
15	"	42 4 200 00	20	"	21 4 200 00
		1000 00			1000 00

2/24/1912 60

Max Beckenack

1911 Aug 10	to Accounting	CP	19	5760.00	1911 Aug 14	by Cash	116	1680.00
15	"	"	31	5760.00	15	"	77	5760.00
15	"	"	37	5760.00	15	"	210	1680.00
15	"	"	43	5760.00				
				4000.00				4000.00
Aug 1	to Accounting	CP	55	2350.00	Aug 12	by Cash	351	9400.00
15	"	"	60	2350.00		Accounting	65	2500.00
15	"	"	67	2350.00				
15	"	"	75	2350.00				
Aug 31	Balance			2350.00				
				11900.00	1912 April 1	by Balance		11900.00
Dec 31	to Cash	CP	121	2500.00				2500.00

Sum 16.50  
 Aug 16 16.50  
 13 13.00  
 15 15.00  
 15 15.00

J. Maclean Smith

1911 Aug 10	to Accounting	CP	20	5760.00	1911 Aug 12	by Cash	147	5760.00
15	"	"	31	2500.00	15	"	210	7500.00
15	"	"	37	2500.00				
15	"	"	43	2500.00				
				12500.00				12500.00

Wm J. Service

1911 Aug 10	to Accounting	CP	20	5760.00	1911 Aug 14	by Cash	116	1680.00
15	"	"	31	5760.00	15	"	77	5760.00
15	"	"	37	5760.00	15	"	210	5760.00
15	"	"	43	5760.00				
				2500.00				2500.00

Thomas W. Thompson

1911 Aug 10	to Accounting	CP	20	5760.00	1911 Aug 12	by Cash	116	1680.00
15	"	"	31	5760.00	15	"	77	5760.00
15	"	"	37	5760.00	15	"	210	5760.00
15	"	"	43	5760.00				
				22500.00				22500.00
Aug 1	to Accounting	CP	55	4700.00	Aug 10	by Cash	500	4700.00
15	"	"	60	4700.00	15	"	52	4700.00
15	"	"	67	4700.00	15	"	51	4700.00
15	"	"	75	4700.00	19	"	50	4700.00
Aug 31	Balance			5000.00		Accounting	19	23000.00
				23000.00				23000.00
Aug 1	to Cash	CP	23	12500.00	1912 April 1	by Balance		5000.00
1	"	"	58	12500.00	Aug 1	by Cash	15	12500.00
				5000.00	19	"	19	2500.00
Dec 31	"	"	9	11700.00	Aug 1	by Cash	405	3500.00
				5100.00	1	"	1	12500.00
31	to Cash	CP	121	5000.00	1	"	5	4440.00
				52500.00	31	"	12	3500.00
								17500.00
				52500.00				52500.00

Sum 16.50  
 Aug 16 16.50  
 13 13.00  
 15 15.00  
 15 15.00

Harry White

1900	10	2	Assessment, ap	20	5,000.00	1900	9	by	bank	14	2,000.00
Dec	15	.	.	32	1,000.00	Dec	27	.	.	10	1,000.00
Jan	15	.	.	35	1,000.00	Jan	1	.	.	26	2,000.00
Feb	15	.	.	41	1,000.00						
					5,000.00						5,000.00
Aug	1	2	Assessment, ap	55	4,125.00	Aug	24	by	bank	36	2,400.00
Oct	16	.	.	60	4,125.00	Oct	27	.	.	34	2,400.00
Nov	15	.	.	67	1,200.00						
Dec	15	.	.	75	4,125.00						
					12,500.00						
					6,050.00						6,050.00
Dec	31	2	Prof & Exp. Ac	12	1,125.00	Apr	1	by	Balance		1,250.00

George B. Wilson

1900	10	2	Assessment, ap	20	5,000.00	1900	7	by	bank	11	1,000.00
Dec	15	.	.	32	1,500.00	Dec	15	.	.	17	500.00
Jan	15	.	.	37	500.00	Jan	14	.	.	19	500.00
Feb	15	.	.	43	500.00	Feb	15	.	.	20	500.00
					2,500.00						2,500.00

E. L. Miller, Jr.

1900	23	2	Assessment, ap	21	4,500.00	1900	23	by	bank	20	4,500.00		
Dec	15	.	.	31	4,175.00	Dec	15	.	.	10	1,500.00		
Jan	15	.	.	37	4,175.00	Jan	15	.	.	1	3,600.00		
Feb	15	.	.	42	7,750.00	Feb	21	.	.	19	1,500.00		
					5,000.00	Feb	15	.	.	21	1,500.00		
					5,000.00						5,000.00		
Aug	1	2	Assessment, ap	55	4,125.00	Aug	13	by	bank	24	4,125.00		
Oct	16	.	.	60	4,125.00	Oct	24	.	.	31	2,500.00		
Nov	15	.	.	67	1,200.00								
Dec	15	.	.	75	4,125.00								
					1,125.00								
					26,250.00								
					4,550.00						4,550.00		
May	29	2	Assessment, ap	21	1,250.00	May	2	by	Balance		26,250.00		
July	22	.	.	24	1,250.00	July	7	.	.	bank	21	4,225.33	
Sept	24	.	.	6	1,250.00								
					72	26,250.00	Sept	31	.	.	Sept	24	1,67
												1,000	
												2,573.33	
												32	
												4,125.41	
												75	
												1,014	
												2,573.33	
												6,050.00	

Mrs. Blanche Peterson

1900	1	2	Assessment, ap	21	1,000.00	1900	22	by	bank	15	2,500.00
Dec	15	.	.	31	1,000.00						
Jan	15	.	.	37	1,000.00						
Feb	15	.	.	43	1,000.00						
					2,500.00						2,500.00

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Wm. D. Clark of Kansas City

1900	1	2	100.00	1900	12	by bank	14.25	250.00
1901	15	Assessment	51.00	1901	15			
1902	15		57.00	1902	15			
1903	15		42.00	1903	15			
			250.00					250.00

Charles, St. Charles, Mo. 1900

1900	1	2	100.00	1900	12	by bank	14.25	375.00
1901	15	Assessment	51.00	1901	15			
1902	15		57.00	1902	15			
1903	15		42.00	1903	15			
			375.00					375.00

Wm. D. Clark of Kansas City

1900	1	2	100.00	1900	12	by bank	14.25	375.00
1901	15	Assessment	51.00	1901	15			
1902	15		57.00	1902	15			
1903	15		42.00	1903	15			
			375.00					375.00

James P. W. Garland 1900

1900	1	2	100.00	1900	12	by bank	14.25	375.00
1901	15	Assessment	51.00	1901	15			
1902	15		57.00	1902	15			
1903	15		42.00	1903	15			
			375.00					375.00



Wm. J. Summey 151 dth 10<sup>th</sup> 1874

1874 Dec 15	3, Annamys, GP	50 1/2 1200 00	1874 Dec 15	3, Annamys, GP	50 1/2 1200 00
1874 Jan 15	"	36 1/2 1200 00	1874 Jan 15	"	36 1/2 1200 00
1874 Feb 15	"	42 1/2 1200 00	1874 Feb 15	"	42 1/2 1200 00
		3600 00			3600 00
1874 Aug 1	3, Annamys, GP	56 1/2 625 00	1874 Aug 1	3, Annamys, GP	56 1/2 625 00
1874 Sep 10	"	60 1/2 625 00	1874 Sep 10	"	60 1/2 625 00
1874 Oct 15	"	66 1/2 625 00	1874 Oct 15	"	66 1/2 625 00
1874 Nov 15	"	74 1/2 625 00	1874 Nov 15	"	74 1/2 625 00
		2500 00			2500 00

Michael Magee

1874 Dec 15	3, Annamys, GP	51 1/2 500 00	1874 Dec 15	3, Annamys, GP	51 1/2 500 00
1874 Jan 15	"	57 1/2 500 00	1874 Jan 15	"	57 1/2 500 00
1874 Feb 15	"	64 1/2 500 00	1874 Feb 15	"	64 1/2 500 00
		1500 00			1500 00

David Masten

1874 Dec 15	3, Annamys, GP	51 1/2 1000 00	1874 Dec 15	3, Annamys, GP	51 1/2 1000 00
1874 Jan 15	"	57 1/2 1000 00	1874 Jan 15	"	57 1/2 1000 00
1874 Feb 15	"	64 1/2 1000 00	1874 Feb 15	"	64 1/2 1000 00
		3000 00			3000 00

1874 Aug 1	3, Annamys, GP	56 1/2 1500 00	1874 Aug 1	3, Annamys, GP	56 1/2 1500 00

Wm. J. Dickson 211 1/2 dth 19<sup>th</sup> 1874

1874 Dec 15	3, Annamys, GP	50 1/2 250 00	1874 Dec 15	3, Annamys, GP	50 1/2 250 00
1874 Jan 15	"	56 1/2 250 00	1874 Jan 15	"	56 1/2 250 00
1874 Feb 15	"	61 1/2 250 00	1874 Feb 15	"	61 1/2 250 00
		750 00			750 00



10/11/1900

## Kosch's Baranna

1900	15-3	Assessment, 90	504,250.00	1901	7	by	land	1004,750.00
1901	15		364,250.00					
1902	15		414,250.00					
1903	15		750.00					750.00

## Frederick A. Cable

1900	15-3	Assessment, 90	504,500.00	1901	7	by	land	1004,500.00
1901	15		364,500.00					
1902	15		424,500.00					
1903	15		1500.00					1500.00

## Kosch's Baranna

1900	15	3 Assessment, 90	314,250.00	1901	12	by land	1,004,250.00
1901	15		474,250.00				
1902	15		424,250.00				
1903	15		750.00				750.00
1904	15	3 Assessment, 90	55,723.50	1905	16	by land	324,000.00
1905	16		60,423.50			Assessment, 60	4,250.00
1906	16		63,860.00				
1907	15		67,823.50				
1908	15		75,423.50				
1909	15		11,250.00				
1910	15		12,500.00				
1911	12	3 Assessment, 90	2,147.50	1912	16	by land	1,004,250.00
1912	16	land	194,777.79	1913	16	by land	1,004,250.00
1913	11		299,921	1914	16	by land	1,004,250.00
1914	1	Assessment, 90	54,147.50	1915	16	by land	1,004,250.00
1915	16		71,000.00	1916	16	by land	1,004,250.00
1916	16	land	498,100.00	1917	16	by land	1,004,250.00
1917	31	Assessment, 90	9,475,000.00	1918	16	by land	1,004,250.00
1918	3		3,742,711	1919	16	by land	1,004,250.00



Baltimore  
1200 Mass River O. River 1 Calt  
1200 - 1200 - 1200 - 1200 -

Ans. No 2/1901

John W. Houston

1200 Mass River O. River 1 Calt  
1200 - 1200 - 1200 - 1200 -

1901	12	By Accounts	94.3	564 1000 00	1901	12	By Cash	244 1000 00
Aug	16			604 1000 00	Aug	22		224 1000 00
Sept	15			664 1000 00	Sept	15		504 1000 00
Oct	15			744 1000 00				
Nov	15							
				4000 00				4000 00

C. W. Grang

1901	12	By Accounts	94.3	564 1125 00	1901	12	By Cash	244 1125 00
Aug	16			604 1125 00	Aug	22	By Cash	61 1125 00
				2250 00				2250 00

1200 Mass River O. River 1 Calt  
1200 - 1200 - 1200 - 1200 -

Ans. No 2/1901

Walter J. Woodman

1200 Mass River O. River 1 Calt

1901	12	By Accounts	94.3	564 2250 00	1901	12	By Cash	244 1500 00
Aug	16			604 2250 00	Aug	22		224 7500
Sept	15			664 2250 00	Sept	17		318 2250
Oct	15			744 2250	Oct	23		344 2250
Nov	15				Nov	29		374 2250
				9000 00				9000 00

William Grang

1901	12	By Accounts	94.3	564 1000 00	1901	12	By Cash	244 4400 00
Aug	16			604 17500	Aug	5	By Cash	57 1250 00
Sept	15			664 17500				
Oct	15			744 17500				
Nov	15			754 17500				
Dec	31	By Accounts		1250 00				
				6050 00				6050 00
Dec	31	By Cash		1250 00	Dec	1	By Accounts	1250 00

John W. Grang

1901	12	By Accounts	94.3	564 1000 00	1901	12	By Cash	244 4400 00
Aug	16			604 17500	Aug	5	By Cash	57 1250 00
Sept	15			664 17500				
Oct	15			744 17500				
Nov	15			754 17500				
Dec	31	By Accounts		1250 00				
				6050 00				6050 00
Dec	31	By Cash		1250 00	Dec	1	By Accounts	1250 00

## E. Clarence Miller 457 Clinton Avenue

1901 Aug 7	3 Cash	294 100 00	1901 Aug 1	By Cash	212 400 00
Sept 16	Accounting	554 175 00	Sept 5	By Cash	7 1250 00
Oct 15	"	604 175 00			
Nov 15	"	674 175 00			
Dec 31	Balance	754 175 00			
		1250 00			
		6050 00			6050 00
Dec 31	By Cash	125 1250 00	1902 Apr 1	By Balance	1250 00

## John B. Parsons English's Daughter

1901 Aug 1	3 Accounting	554 2350 00	1901 Aug 2	By Cash	244 2350 00
Sept 16	"	604 2350 00	Sept 17	"	3104 2350 00
Oct 15	"	674 2350 00	Oct 18	"	3304 2350 00
Nov 15	"	754 2350 00	Nov 16	"	3604 2350 00
Dec 31	Balance	2500 00	Dec 31	By Balance	70 1250 00
		11900 00			11900 00
Dec 31	By Cash	125 1250 00	1902 Apr 1	By Balance	2500 00

## Estate of Daniel Buck 1505 4 24th St

1901 Aug 1	3 Accounting	554 2350 00	1901 Aug 5	By Cash	244 2350 00
Sept 16	"	604 2350 00	Sept 17	"	3104 2350 00
Oct 15	"	674 2350 00	Oct 18	"	3304 2350 00
Nov 15	"	754 2350 00	Nov 16	"	3604 2350 00
Dec 31	Balance	2500 00	Dec 31	By Balance	77 1250 00
		11900 00			11900 00
Dec 31	By Cash	125 1250 00	1902 Apr 1	By Balance	2500 00

## L. M. Lattinette Cash Land Sales

1901 Aug 1	3 Accounting	554 1200 00	1901 Aug 5	By Cash	244 1200 00
Sept 16	"	604 1200 00	Sept 17	"	3122 1200 00
Oct 15	"	674 1200 00	Oct 21	"	3404 2400 00
Nov 15	"	754 1200 00	Nov 15	Accounting	125 1250 00
Dec 31	Balance	1250 00			6050 00
		6050 00			6050 00
Dec 31	By Cash	125 1250 00	1902 Apr 1	By Balance	1250 00

## Robert H. Thompson 10 Kennedy Ave

1901 Aug 12	3 Accounting	554 2500 00	1901 Aug 6	By Cash	244 2500 00
Sept 16	"	604 2500 00	Sept 17	"	3104 2500 00
Oct 15	"	674 2500 00	Oct 18	"	3304 2500 00
Nov 15	"	754 2500 00	Nov 15	"	3604 2500 00
Dec 31	Balance	5000 00			5000 00
		12500 00			12500 00
Dec 31	By Cash	125 1250 00	1902 Apr 9	By Cash	5 2450 00
		24000 00	Apr 15	By Cash	15 500 00
		55000 00	Apr 25	By Cash	16 9400 00
			May 9	By Cash	91 200 00
					35000 00
July 10	By Cash	45000 00	July 10	By Cash	26 50000 00

## Paul E. Slipp 100 1/2 2nd St

1901 Aug 1	3 Accounting	554 1200 00	1901 Aug 7	By Cash	244 1200 00
Sept 16	"	604 1200 00	Sept 24	"	3122 1200 00
Oct 15	"	674 1200 00	Oct 11	"	3404 2400 00
Nov 15	"	754 1200 00	Nov 12	Accounting	125 1250 00
Dec 31	Balance	1250 00			6050 00
		6050 00			6050 00
Dec 31	By Cash	125 1250 00	1902 Apr 1	By Balance	1250 00

William P. Reed 507 Washington, Wash. D.C.

1901 Aug 12	2	Assessment 94.3	58 1/2	2500 00	1901 Aug 1	1	by Cash	492 1/2	2500 00
1901 Aug 10			60 1/2	2500 00	1901 Aug 17			510 1/2	2500 00
1901 Aug 15			66 1/2	2500 00	1901 Aug 15			530 1/2	2500 00
1901 Aug 15			74 1/2	2500 00	1901 Aug 16			564 1/2	2500 00
				10000 00					10000 00
Aug 14	3	Rate by	5	15000 00	Aug 12	1	by Cash	24 1/2	4900 00
				5000 00					100 00
									5000 00
Oct 5	2	Assessment 94.3	100	25000 00	Oct 5	1	by Cash	422 1/2	5000 00
Dec 6		Rate by	2	5000 00	Dec 23			124 1/2	102 1/2
Dec 23		Cash	60	2 1/2				124 1/2	5000 00
				36102 1/2					36102 1/2

Albert C. Dickey 64 Duane St. New York

1901 Aug 12	2	Assessment 94.3	58 1/2	2500 00	1901 Aug 1	1	by Cash	492 1/2	2500 00
1901 Aug 16			60 1/2	2500 00	1901 Aug 15			510 1/2	2500 00
1901 Aug 15			66 1/2	2500 00	1901 Aug 15			540 1/2	2500 00
1901 Aug 15			74 1/2	2500 00	1901 Aug 31			574 1/2	2500 00
				10000 00					10000 00

Washington Heights 312 1/2 St. New York

1901 Aug 1	2	Assessment 94.3	58 1/2	2500 00	1901 Aug 1	1	by Cash	492 1/2	2500 00
1901 Aug 16			60 1/2	2500 00	1901 Aug 23			510 1/2	2500 00
1901 Aug 15			66 1/2	2500 00	1901 Aug 23			540 1/2	2500 00
1901 Aug 15			74 1/2	2500 00	1901 Aug 23			574 1/2	2500 00
				2500 00					17 1/2
				11900 00					17 1/2
Dec 31	2	Assessment 94.3	122 1/2	2500 00	Dec 31	1	by Balance	122 1/2	2500 00

Mary Elizabeth Carter 453 W. 141 St. New York

1901 Aug 12	2	Assessment 94.3	58 1/2	12500 00	1901 Aug 12	1	by Cash	492 1/2	12500 00
1901 Aug 16			60 1/2	12500 00	1901 Aug 16			510 1/2	12500 00
1901 Aug 15			66 1/2	12500 00	1901 Aug 15			530 1/2	12500 00
1901 Aug 15			74 1/2	12500 00	1901 Aug 14			564 1/2	12500 00
				5000 00					5000 00

David Baird 2 Canal St. New York

1901 Aug 1	2	Assessment 94.3	58 1/2	12500 00	1901 Aug 12	1	by Cash	492 1/2	12500 00
1901 Aug 16			60 1/2	12500 00	1901 Aug 13			510 1/2	12500 00
1901 Aug 15			66 1/2	12500 00	1901 Aug 4			530 1/2	2500 00
1901 Aug 15			74 1/2	12500 00					74 1/2
				12500 00					6050 00
				6050 00					6050 00
Dec 31	2	Assessment 94.3	122 1/2	12500 00	Dec 31	1	by Balance	122 1/2	12500 00

Charles J. Warwick 700 W. 141 St. New York

1901 Aug 1	2	Assessment 94.3	58 1/2	12500 00	1901 Aug 13	1	by Cash	492 1/2	12000 00
1901 Aug 16			60 1/2	12500 00	1901 Aug 4			510 1/2	12000 00
1901 Aug 15			66 1/2	12500 00	1901 Aug 21			530 1/2	2500 00
1901 Aug 15			74 1/2	12500 00					10 1/2
				12500 00					6050 00
				6050 00					6050 00
Dec 31	2	Assessment 94.3	122 1/2	12500 00	Dec 31	1	by Balance	122 1/2	12500 00

*Lucid Hoffman Northcutt* 565 land by then double by

1901 Aug	16	By Amending Q. B.	565 1175 00	1901 Aug	16	By land	565 1175 00
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*James Gandy* 565 land by then double by

1901 Aug	25	By the A. B. land	565 1175 00	1901 Aug	25	By land	565 1175 00
1901 Sep	16	By Amending Q. B.	605 1175 00	1901 Sep	15	By land	605 1175 00
1901 Oct	15	By land	665 1175 00	1901 Oct	14	By land	552 1175 00
1901 Nov	15	By land	755 1175 00	1901 Nov	11	By land	540 1175 00
1901 Dec	31	By Balance	1250 00	1901 Dec	31	By Balance	1250 00
1901 Jan	31	By Balance	5950 00	1901 Jan	31	By Balance	5950 00
1901 Feb	31	By Balance	1250 00	1901 Feb	31	By Balance	1250 00

*Thomas J. Gandy* 1175 1/2 by then double by

1901 Aug	25	By the A. B. land	565 1175 00	1901 Aug	25	By land	565 1175 00
1901 Sep	16	By Amending Q. B.	605 1175 00	1901 Sep	15	By land	605 1175 00
1901 Oct	15	By land	665 1175 00	1901 Oct	14	By land	552 1175 00
1901 Nov	15	By land	755 1175 00	1901 Nov	11	By land	540 1175 00
1901 Dec	31	By Balance	1250 00	1901 Dec	31	By Balance	1250 00
1901 Jan	31	By Balance	5950 00	1901 Jan	31	By Balance	5950 00
1901 Feb	31	By Balance	1250 00	1901 Feb	31	By Balance	1250 00

*Walter W. Jamieson* 565 land by then double by

1901 Aug	25	By the A. B. land	565 1175 00	1901 Aug	25	By land	565 1175 00
1901 Sep	16	By Amending Q. B.	605 1175 00	1901 Sep	15	By land	605 1175 00
1901 Oct	15	By land	665 1175 00	1901 Oct	14	By land	552 1175 00
1901 Nov	15	By land	755 1175 00	1901 Nov	11	By land	540 1175 00
1901 Dec	31	By Balance	1250 00	1901 Dec	31	By Balance	1250 00
1901 Jan	31	By Balance	5950 00	1901 Jan	31	By Balance	5950 00
1901 Feb	31	By Balance	1250 00	1901 Feb	31	By Balance	1250 00

*J. Mason Thompson* 565 land by then double by

1901 Aug	25	By the A. B. land	565 1175 00	1901 Aug	25	By land	565 1175 00
1901 Sep	16	By Amending Q. B.	605 1175 00	1901 Sep	15	By land	605 1175 00
1901 Oct	15	By land	665 1175 00	1901 Oct	14	By land	552 1175 00
1901 Nov	15	By land	755 1175 00	1901 Nov	11	By land	540 1175 00
1901 Dec	31	By Balance	1250 00	1901 Dec	31	By Balance	1250 00
1901 Jan	31	By Balance	5950 00	1901 Jan	31	By Balance	5950 00
1901 Feb	31	By Balance	1250 00	1901 Feb	31	By Balance	1250 00

*Lawson Northcutt*

1901 Aug	25	By the A. B. land	565 1175 00	1901 Aug	25	By land	565 1175 00
1901 Sep	16	By Amending Q. B.	605 1175 00	1901 Sep	15	By land	605 1175 00
1901 Oct	15	By land	665 1175 00	1901 Oct	14	By land	552 1175 00
1901 Nov	15	By land	755 1175 00	1901 Nov	11	By land	540 1175 00
1901 Dec	31	By Balance	1250 00	1901 Dec	31	By Balance	1250 00
1901 Jan	31	By Balance	5950 00	1901 Jan	31	By Balance	5950 00
1901 Feb	31	By Balance	1250 00	1901 Feb	31	By Balance	1250 00



*Butcher (Linn) Northcutt*

1991 Aug 16 2y Ammungs 9423 56.2500 - 1991 Sep 6 2y Cash 504.2500 00

*Butcher Perry Northcutt*

1991 Aug 16 2y Ammungs 9423 56.2500 - 1991 Sep 15 2y Cash 510.2500 00

*Miss Sybil Emma Northcutt*

1991 Aug 16 2y Ammungs 9423 56.2500 - 1991 Sep 15 2y Cash 510.2500 00

*L. B. Southey*

1991 Sep 3 2y Ammungs 9423 57.7500 00 1991 Sep 4 2y Cash 504.7500 00

*E. Henry Barnes & Henry Barnes New Haven Conn*

1991 Sep 5 2y Ammungs 9423 57.7500 00 1991 Sep 5 2y Cash 504.7500 00

*Richard W. Dyer* 30-1/1991  
31st March 1891

1991 Aug 6	2y Ammungs 9423	57.1175 00	1991 Sep 6	2y Cash	504.1175 00
16	" Ammungs 9423	60.81175 00	17	"	512.1175 00
15	"	66.81175 00	17	"	504.1175 00
15	"	75.1175 00	17	"	1175 00
		47.00 00		"	4700 00
1991 Sep 1	2y Balance	1175 00	1991 Sep 19	2y Cash	9.1175 00
11	"	12.50 00		"	1250 00
		2425 00			2425 00

## Anna Agnes Northcott

1901 Apr	3	2 Commencing Apr 3	50 + 2500 -	1901 Apr	5	by Cash	322 + 2500 00
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## Easts. B. Baillie

1901 Apr	3	2 Commencing Apr 3	50 + 2500 -	1901 Apr	5	by Cash	322 + 2500 00
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McLury St Boardman for the Fairchild Comm. Bond  
Mar. Howard Brown

1901 Apr	16	2, Commencing Apr 3	60 + 2500 -	1901 Apr	9	by Cash	300 + 2500 -
1901 Apr	15	"	60 + 2500 -	1901 Apr	10	"	310 + 2500 -
1901 Apr	15	"	75 + 2500 -	1901 Apr	15	"	325 + 2500 -
			1000 00	1901 Apr	16	"	326 + 2500 -
							1000 00

## Charles Parry (75 500.00 by 1894)

1901 Apr	25	2, by H. H. Brown	61 + 1000 -	1901 Apr	3	by Cash	320 + 1000 00
1901 Apr	15	" Commencing Apr 3	61 + 1000 -	1901 Apr	3	"	342 + 1000 00
1901 Apr	15	"	75 + 1000 -	1901 Apr	1	"	376 + 1000 00
			3000 00				3000 00

## L. E. Parry (75 500.00 by 1894)

1901 Apr	25	2, by H. H. Brown	61 + 125 -	1901 Apr	3	by Cash	320 + 125 00
1901 Apr	15	" Commencing Apr 3	61 + 125 -	1901 Apr	3	"	342 + 125 00
1901 Apr	15	"	75 + 125 -	1901 Apr	1	"	376 + 125 00
			375 00				375 00

## L. A. Runkel Marrying Ed

1901 Apr	15	2, Commencing Apr 3	66 + 1750 00	1901 Apr	12	by Cash	322 + 6250
1901 Apr	15	"	75 + 6250	1901 Apr	12	"	370 + 6250
			1500 00				1500 00







C. L. Miller, Jr.

1901	May	10	3	Blue Ridge	112750.00	1901	May	1	By Balance	11526250.00
June	31		1	Dep. Bal. Fund	1126250.00	June	31	3	Blue Ridge	11512600.00
								6	by	1162250.00
					39000.00					39000.00
1901	May	10	3	Blue Ridge	10412750.00	1901	May	29	By Balance	1127325925
May	24		1		1124300500				Land	11471249175
	24			Land	112751062	May	31		Balance	1135025500
									Land	1062
									Blue Ridge	112750.00
					2576562					2576562
May	20	3	Blue Ridge	11513011.50	May	27	By	Land	11412750.00	
June	3			1164326510				Balance	117126134	
				26276.44	June	3		Balance	1191326510	
									26276.44	

(Anthony H. W. Neal) Burlington, N.C.

1901	20	20 Bureau	101 14750.00	1901	29	By	Balance	127 200.00
By	24	Blue Ridge	10 10200.00	By	3	Blue Ridge	24750.00	
			24950.00				24950.00	
June	1	3 Blue Ridge	16 2607135	June	23	By	Balance	114 2607135

(William P. Rice) 107 Washington St. Brooklyn, N.Y.

1901	Apr 9	3	Blue Ridge	11452050.00	Apr 20	By	Land	114010695
	24		Land	117195			Blue Ridge	11500.00
				520695				520695









*J. V. Hagerty Philadelphia Pa*

1903 Jan 30	By Balance L.L. 299	650.51	1903 Jan 30	By Cash Payments	94.66	6690.
				By 22m	157.	1361.
		650.51				678.31

*Amos Shover Sept 6.2. Reading Pa*

1903 Jan 30	By Balance L.L. 299	75.44	1903 Jan 30	By New York	157.	73.44
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Grand Co 490 bling by the good.

1901 June 30 By Balance L 500 797.91 1901 June 27 By Cash 156 797.91

J. Edward Ogden Co 147 bling by the good

1901 June 30 By Balance L 500 51.69 1901 June 27 By Cash 147 51.69

N. D. Young Cashier

1901 May 1 By Cash 50 500.00 1901 June 25 By Cash 104 604.41  
17 By Cash 153 000.00 30 By Balance L 5 1095.91  
21 " 145 00.00  
7 156 00  
7 00.00  
740.00

The National Building Supply Co. 147 bling by the good

1901 June 30 By Balance L 500 275.00 1901 June 17 By Cash 91 275.00  
15 " 150.00 27 " 150.00  
15 " 160.00 30 " By Balance L 301 145.00  
16 " 140.00  
17 " 140.00  
18 " 170.00  
20 " 225.00  
19 " 170.00  
23 " 150.00  
24 " 170.00  
25 " 150.00  
200.00  
200.00

## Felling &amp; Crane

Aug 1	3 Hammer	109 246.55	Aug 14	4 of Churn	144 5319.00
" 5	" Bie Day	118 5319.00	" 11	" Bad	155 1254.99
" "	" "	115 5315.76	" "	" Churn	148 2097.1
Jan 1	" "	116 77460.00	Jan 9	" Churn	152 1324.45
" 30	" Bad 22	292 572.79	" 17	" Churn	153 9339.1
			" 22	" Churn	93 7145.16
			" "	" Churn	155 214.45
		22912.60			22912.60

## Mr. Herman Drieder

Aug 9	3 Bie Day	142 2000.00	Aug 10	4 of Churn	117 2050.00
Aug 1	" "	124 1500.00	Aug 11	" Bie	117 5025.00
Aug 16	" Bie Day	145 3533.00	" "	" Bad	128 1469.75
" 16	" Bie Day	152 476.27	Aug 16	" Churn	145 2450.00
		6011.60			6011.60

## Rock Hunting by J. J. J.

Aug 6	3 Bie Day	121 799.11	Aug 4	4 of Churn	137 799.11
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## Shell fishing by J. J. J.

Aug 16	3 Bie Day	151 1565.97	Aug 16	4 of Churn	145 1565.97
Jan 30	" Bad 22	301 493.69	Jan 27	" "	156 493.69
		2079.66			2079.66

Morris by Machine & Linn by

[illegible]

F. A. Upton 20 High Del. Orange St

1943 Jun 26 by Gurney	4.13750	1943 Jun 30 by Baw 22	102	137.50 c
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General Electric Co

1921	May	25	3	bank	514 537 97	1921	May	29	3	bank	1154 2170
				free day	24199763					free day	816100
					163560						75560
1921	May	15	3	free day	4400192	1921	May	15	3	free day	1191 7711
				bank	57196414					free day	12615500
					5965358						5965358
1921	May	21	3	bank	74196297	1921	May	31	3	free day	1054 5047
				free day	712408560					free day	550070
				bank	938 36544					free day	135479170
				free day	6128 74663					free day	409963
1921	May	7	3	bank	1187162104	1921	May	6	3	free day	107162104
				free day	118744210					free day	107162104
				bank	118730560					free day	107162104
				free day	761100192					free day	141400192
					1178478					free day	1178478

Gleason Tool Company

<sup>1968</sup>									
Aug	2	Bee Day	+ 724.77	<sup>1968</sup>	Dec	2	of Beef	Wish 14.49	
							Lard	* 584.71025	
			<u>724.77</u>					<u>724.77</u>	
Aug	5	Bee Day	+ 124.51000	<sup>1968</sup>	Aug	11	of Beef	744.50700	
							Lbs	1344.1024	
			<u>512.00</u>					844.0000	

## Edison Coal Mining Syndicate Ltd

1902 May	1	3	Coal	19	2590	1902 June	7	by	Coal	21	2590
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## Hutton Bay &amp; bottom Mills 256 Spring by Hutton

1902 Feb	22	3	Coal by	16	155203	1902 Feb	22	by	Coal	107	153902
					155203		20		Coal	145	152103

## St. H. Amory (Huntville &amp; Co)

1902 May	1	by	Coal	112	2107	1902 June	12	by	Coal	119	3570
	20	12	Coal	56	1603						3570
					3570						3570

## J. C. Richards &amp; Son

1902 May	1	3	Coal by	2	222206	1902 May	10	by	Coal	17	222206
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## Pomphrey, Gaskin &amp; Co. (Huntville &amp; Co)

1902 June	3	3	Coal	3	159277	1902 June	3	by	Coal	22	159277
July	2			6	106105	July	1	by	Coal	41	105212
									July	109	923
					106105						106105
1902 June	25	3	Coal	154	670404	1902 June	29	by	Coal	86	192500
	30	3	Coal	40	2545192						254519
					925000						925000

## Atlantic Refining Company

1902 May	21	3	Coal	110	5500	1902 May	21	by	Coal	110	10350
				40	4550						10350
					10350						10350

## Robert W. Kearney

1902	May	25	3/2	Bill Rogers	1	142571	1902	May	25	3/2	Bill Rogers	1	142571
						142571							
July	17	3	1/2	Carl	27	2456	July	17	3	1/2	Carl	27	2456
						47624							
				Bill Rogers	4	122782					Bill Rogers	4	122782
						172242							
Nov	17	3	1/2	Carl	50	61391	Nov	17	3	1/2	Carl	50	61391
				Bill Rogers	7	62619					Bill Rogers	7	62619
						124010							

## Gleason St. Co

1902	May	25	3/2	Bill Rogers	1	1213170	1902	May	25	3/2	Bill Rogers	1	1213170
						213170							
July	5	3	1/2	Bill Rogers	4	131233	July	5	3	1/2	Bill Rogers	4	131233
						4142118							
						142113							
Aug	29	3	1/2	Carl	49	32504	Aug	29	3	1/2	Carl	49	32504
				Bill Rogers	7	100593					Bill Rogers	7	100593
						133201							

## General Electric Co

1902	May	29	3/2	Bill Rogers	1	1113115	1902	May	29	3/2	Bill Rogers	1	1113115
						2176492							
						3110444							
July	23	3	1/2	Carl	29	242954	July	23	3	1/2	Carl	29	242954
				Bill Rogers	4	160504					Bill Rogers	4	160504
						1146792							
Aug	14	3	1/2	Carl	54	192232	Aug	14	3	1/2	Carl	54	192232
				Bill Rogers	5	544422					Bill Rogers	5	544422
						8161390							
Aug	10	3	1/2	Carl	168	29511	Aug	10	3	1/2	Carl	168	29511
				Bill Rogers	7	44551					Bill Rogers	7	44551
						50120213							
Nov	22	3	1/2	Carl	7	154770	Nov	22	3	1/2	Carl	7	154770
				Bill Rogers		191549					Bill Rogers		191549

## John W. Steelings Iron Co

1902	May	21	3/2	Bill Rogers	1	110522	1902	May	21	3/2	Bill Rogers	1	110522
						110522							
July	7	2	1/2	Carl	27	1130	July	7	2	1/2	Carl	27	1130
						562411							
				Bill Rogers	4	73687					Bill Rogers	4	73687
						111652							
Aug	6	3	1/2	Bill Rogers	14	53270	Aug	6	3	1/2	Bill Rogers	14	53270
				Bill Rogers	15	57968					Bill Rogers	15	57968
						57968							

## Whitney Condenser Engineering Co

1902	May	21	3/2	Bill Rogers	1	532746	1902	May	21	3/2	Bill Rogers	1	532746
						532746							
July	21	3	1/2	Bill Rogers	4	555164	July	21	3	1/2	Bill Rogers	4	555164
						555164							
Aug	17	3	1/2	Bill Rogers	7	110244	Aug	17	3	1/2	Bill Rogers	7	110244
						11491946							
						12144635							
						236544							

## Webster Manufacturing Co

1902	May	21	3/2	Bill Rogers	1	107000	1902	May	21	3/2	Bill Rogers	1	107000
						14215174							
						515174							

*Grand Lord Notes (Continued)*

1901	21	3	new dory	10	440.10	1901	7	By	bank	9	440.10
1901	21	3	new dory	11	500.00	1901	27	By	new dory	12	20.10
				741.10							15.90
				740.10							740.10

*Morris Wheeler, Jr.*

1902	21	3	new dory	1	465.47	1902	21	By	bank	12	459.30
				465.47						584	91.57
											465.47

*Reading Lord & Co.*

1902	21	3	new dory	1	1525.25	1902	21	By	bank	12	1709.49
				1525.25						15	55.29
											1525.25

*Maryland Trust Company*

1902	21	3	new dory	73	1173.20	1902	6	By	bank	54	1173.20
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*Charles Benisch, Jr.*

1902	21	3	new dory	75	947.79	1902	21	By	bank	176	947.79
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*Morris County (Machine) & Lord & Co.*

1902	21	3	new dory	79	2.55	1902	21	By	bank	155	2217.60
				1	2215.05						2217.60
					2217.60						951652.25
1902	21	3	new dory	17	2515	1902	29	By	bank	1652.25	
				2	1629.15						1652.25
					1652.25						101429.19
1902	21	3	new dory	4	1506.72	1902	21	By	bank	1506.72	
					1506.72						101422.09
1902	21	3	new dory	64	1105.15	1902	21	By	bank	101422.09	
				113	543.04						115315.19
				518	753.56						1506.72
				12	766.55						5173.13
					5173.13						



*The Passaic Rolling Mills Co*

1901 June 27	3	Iron bars	52.1	9 12	1901 Aug 1	3	Iron bars	55.1	9 12
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*B. F. Shurtzberg & Co Antwerp*

1901 May 29	2	Iron bars	15.1	17.49 94	1901 May 29	2	Iron bars	17.1	17.49 94
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*Waltham Manufacturing Co*

1901 May 2	2	Iron bars	64.1	260 74	1901 June 7	2	Iron bars	64.1	260 74
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*Charles E. Dutton Company*

1901 May 29	2	Iron bars	15.1	612 00	1901 May 29	2	Iron bars	15.1	612 00
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*The Blomberg Steam Boilers Co*

1901 May 15	2	Iron bars	27.1	941 30	1901 June 9	2	Iron bars	15.1	1736 64
1901 May 16	1	Iron bars	27.1	941 30					
1901 May 16	1	Iron bars	9.1	222 50					
1901 June 30	1	Iron bars	15.1	612 00					
			27.1	2584 80					
				1736 64					

*Alfred Portland Cement Co*

1901 June 6	2	Iron bars	58.1	232 00	1901 July 26	2	Iron bars	58.1	232 00
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## Masonry

1960	4	20	Barb	53.1	105.00	1960	5	25	W. H. Martin & Co.	16	80.75
July	7		Shut down	13.1	15	July	6		Balance	17	85.11.76
	10		Barb	53.1	102.50						
	16			57.1	104.5						
	17			1.1	2.66						
	19			61.1	112.44						
	23			1.1	34.90						
	27			63.1	41.16						
	30			1.1	59.4						
Aug	1		Pay due	14.1	32.64						
	2		Barb	65.1	19.22						
	14			71.1	104.30						
	15		Pay due	10.1	24.91						
	17		Barb	71.10	72.70						
	18			1.1	35.00						
	19			75.1	42.57						
	23			77.1	27.95						
				1.1	91.66						
	24			79.1	81.55						
	24		W. H. Martin & Co.	14.1	12.68						
	25		Barb	79.1	109.44						
	30			61.1	157						
				1.1	175.55						
June	2		Pay due	15.1	2.75						
	6			15.1	412.6						
	7		Barb	85.1	25.11						
	11			1.1	23.5						
	12			17.1	10.14						
	13			1.1	49.00						
	13			1.1	51.46						
	16			49.1	54.55						
	16		Pay due	91.1	45.62						
	18		Shut down	15.1	219.24						
	19			1.1	74.41						
	21		W. H. Martin & Co.	16.1	140.43						
			Barb	93.1	105.13						
				1.1	45.17						
	26			97.1	202.62						
July	29			1.1	137						
	5			101.1	63.70						
				1.1	105.5						
				1.1	30.00						
				1.1	107.4						
	6		Pay due	17.1	1915.34						
					660.54						

660.74

## Masonry

1960	6	20	Barb	19.1	55.11.76	1960	24	25	Barb	12.1	20.10
July	12		Barb	10.14	25	July	25		Balance	19.1	293.13.62
	13			10.14	23.50						
			Pay due	17.1	2070.76						
	20		Barb	105.1	42.77						
	21		Shut down	17.1	540.27						
	23		Barb	107.1	2.23						
	25			107.1	90.75						
	31			113.1	16.0						
				1.1	24.99						
				109.1	7.59						
				1.1	233.27						
				111.1	60						
				1.1	100.00						
Aug	2			113.1	117.4.25						
	3		W. H. Martin & Co.	10.1	113.00						
	9		Barb	115.1	81.55						
	10		Pay due	20.1	214.40						
	15			21.1	263.76						
	17		Barb	117.1	2.47						
	21			1.1	210.77						
				119.1	54.27						
				1.1	94.51						
	24			121.1	107.75						
				1.1	210.71						
			Pay due	22.1	279.96						
	25		Shut down	22.1	235.44						
Sept	31		Barb	125.1	333.20						
				1.1	51.00						
				1.1	42.85						
				127.1	55.75						
				1.1	50.26						
				129.1	2.43						
				1.1	34.75						
	4		W. H. Martin & Co.	24.1	95.54						
	6		Barb	130.1	271.24						
	11		Pay due	23.1	293.04						
	12		Barb	130.1	14.00						
				1.1	19.12						
				135.1	5.62						
	14			1.1	97.45						
	17		Shut down	23.1	302.61						
	22		Pay due	24.1	262.94						
	25		Barb	137.1	62.95						
				1.1	37.47						
				293.33.76							

293.33.76



## The Cincinnati Edison Electric Co Cincinnati Oh

1899 Nov	16	20	Load	214 4280.00	1899 Nov	11	By Eastman Davis	11 4280.00
<hr/>								
Vickerman's Postpaid Laundry Co								
1899 June	25	By Manning	161 54.70	1899 Aug	5	By Manning	151 1413.50	
Aug	5	Load	113 1724.22				1413.50	
			1413.50					
Dec	1	By Manning	29 1 243.50	Dec	21	By Manning	32 1 294.00	
	21	Load	103 50.50				294.00	
			294.00					

Pay Roll  
Vogel's Electric Sewing Machine Co Cincinnati Oh

1899	17	By Load	17 6 345.09	1899	Aug	27	By Eastman Davis	11 6 367.54
	20		17 6 2275					367.54
			367.54					
April	5	By Load	53 1 545.55	Aug	1	By Eastman Davis	15 1 535.55	
	7		7 10364.49					14 3367.40
Aug	2		65 1 500.54	June	1			15 1 499.49
	15		71 1 5066.54		6			15 1 5066.54
June	4		15 1 6155.41		14			1 1 6156.25
	19	New Account	16 1 47.57	July	6			17 1 6246.90
		Load	91 1 6179.64		13			1 6450.99
July	1		10 1 643.65					
	13	New Account	17 1 19.50					
			33 1 15.40					33 1 15.40
July	19	By Load	105 1 594.69	Aug	13	By Eastman Davis	20 1 5911.54	
Aug	5		110 1 7240.97		15			21 1 7250.22
	13	Eastman Davis	20 1 14.69					13 1 71.00
	15	New Account	21 1 15.25					
			13 1 63.70					13 1 67.50
Aug	20	By Load	117 1 7245.04	Aug	27	By Eastman Davis	22 1 7246.79	
	27	New Account	21 1 5475					23 1 7617.23
Sept	4	By Load	133 1 7399.92		22			24 1 6952.03
	7	New Account	23 1 17.25	Oct	1			1 1 753.05
	19	Load	135 1 6933.03		25			25 1 912.22
	22	New Account	24 1 19.00		1			26 1 9677.47
Oct	4	By Load	143 1 4717.12		20			27 1 6550.17
	7	New Account	24 1 15.93	Nov	6			29 1 7094.96
	15	Load	154 1 912.20		22			33 1 803.59
	30		107 1 500.00		12			35 1 7511.46
Nov	6		163 1 9014.50		21			39 1 7493.36
	7	Eastman Davis	26 1 44.77	Dec	1			40 1 7733.44
	19	Load	169 1 6581.44		13	Eastman Davis	33 1 800.00	
	20	Eastman Davis	20 1 19.25					
Dec	4	By Load	175 1 7094.96					
	15		171 1 7971.00					
	22	Eastman Davis	52 1 5436					
	25	Load	105 1 500.00					
1901	5		109 1 6615.16					
Jan	12	Eastman Davis	53 1 126.30					
	18	Load	177 1 7446.00					
	21	Eastman Davis	54 1 1127.25					
	30	Load	203 1 500.00					
Feb	4		107 1 7426.44					
	7	Eastman Davis	40 1 47.02					
	13	Load	211 1 500.00					
			95 1 6144					

## Pay-roll

1901	13	2	Balanced	201	500.00	Feb 25	of	Endrine	444 6420 748
Feb	19		End	214 6041 76	Mar 1				454 6716 474
23				4 500.00	25				4 7457 594
25			Endrine	444 6420 748	25				444 6420 748
Mar	4		End	214 6041 76	25				444 6420 748
7				214 6041 76	25				444 6420 748
8			Endrine	444 6420 748	25				444 6420 748
19			End	214 6041 76	25				444 6420 748
25				214 6041 76	25				444 6420 748
25			Endrine	444 6420 748	25				444 6420 748
Apr	1		End	214 6041 76	25				444 6420 748
6				214 6041 76	25				444 6420 748
8			Endrine	444 6420 748	25				444 6420 748
16			End	214 6041 76	25				444 6420 748
23			Endrine	444 6420 748	25				444 6420 748
25			End	214 6041 76	25				444 6420 748
May	3			214 6041 76	25				444 6420 748
6				214 6041 76	25				444 6420 748
7			Endrine	444 6420 748	25				444 6420 748
16			End	214 6041 76	25				444 6420 748
24			Endrine	444 6420 748	25				444 6420 748
June	4		End	214 6041 76	25				444 6420 748
8				214 6041 76	25				444 6420 748
19			Endrine	444 6420 748	25				444 6420 748
24				214 6041 76	25				444 6420 748
July	1		End	214 6041 76	25				444 6420 748
6				214 6041 76	25				444 6420 748
8			Endrine	444 6420 748	25				444 6420 748
19			End	214 6041 76	25				444 6420 748
24			Endrine	444 6420 748	25				444 6420 748
Aug	1			214 6041 76	25				444 6420 748
3			End	214 6041 76	25				444 6420 748
19				214 6041 76	25				444 6420 748
25			Endrine	444 6420 748	25				444 6420 748
Sept	4		End	214 6041 76	25				444 6420 748
7			Endrine	444 6420 748	25				444 6420 748

107654

## Pay-roll

1901	7	3	Balanced	224 500.00	Feb 25	of	Endrine	544 5257 75
Feb	14		End	214 6041 76	25			544 5257 75
16			Endrine	444 6420 748	25			544 5257 75
19			End	214 6041 76	25			544 5257 75
23			Endrine	444 6420 748	25			544 5257 75
25			End	214 6041 76	25			544 5257 75
Mar	3		End	214 6041 76	25			544 5257 75
12			Endrine	444 6420 748	25			544 5257 75
15			End	214 6041 76	25			544 5257 75
23			Endrine	444 6420 748	25			544 5257 75
25			End	214 6041 76	25			544 5257 75
Apr	5		End	214 6041 76	25			544 5257 75
6				214 6041 76	25			544 5257 75
11			Endrine	444 6420 748	25			544 5257 75
19			End	214 6041 76	25			544 5257 75
26			Endrine	444 6420 748	25			544 5257 75
May	4		End	214 6041 76	25			544 5257 75
9			Endrine	444 6420 748	25			544 5257 75
11			End	214 6041 76	25			544 5257 75
21			Endrine	444 6420 748	25			544 5257 75
24			End	214 6041 76	25			544 5257 75
June	4		End	214 6041 76	25			544 5257 75
10			Endrine	444 6420 748	25			544 5257 75
17			End	214 6041 76	25			544 5257 75
24			Endrine	444 6420 748	25			544 5257 75
July	1		End	214 6041 76	25			544 5257 75
8			Endrine	444 6420 748	25			544 5257 75
15			End	214 6041 76	25			544 5257 75
22			Endrine	444 6420 748	25			544 5257 75
29			End	214 6041 76	25			544 5257 75
Aug	5		End	214 6041 76	25			544 5257 75
12			Endrine	444 6420 748	25			544 5257 75
19			End	214 6041 76	25			544 5257 75
26			Endrine	444 6420 748	25			544 5257 75
Sept	3		End	214 6041 76	25			544 5257 75
10			Endrine	444 6420 748	25			544 5257 75
17			End	214 6041 76	25			544 5257 75
24			Endrine	444 6420 748	25			544 5257 75
Oct	1		End	214 6041 76	25			544 5257 75
8			Endrine	444 6420 748	25			544 5257 75
15			End	214 6041 76	25			544 5257 75
22			Endrine	444 6420 748	25			544 5257 75
29			End	214 6041 76	25			544 5257 75

111264

## Plans

1990	May	1	Dr. Exp. & Debit	123456789	99	Apr	10	Dr. Debit	60	150
Apr	4	bank	53	3651	Aug	10	Dr. Debit	1052471	22	
	11			49710						
				772						
				45032						
			551	122						
				152						
				106						
				590						
12				612						
				535						
19			591	935						
				40502						
				353						
20			61	25						
26			63	54204						
27				371						
2			65	54569						
4				49109						
8			67	7509						
11				201						
				4909						
			69	90						
				36736						
15			74	5240						
				36492						
				20438						
29			71	55938						
31			73	54477						
June	7		75	9079						
			77	51561						
13			79	474						
				54536						
21			85	700						
				36554						
22				20493						
				266						
29			99	57467						
6			101	41442						
July				15050						
12			103	51042						
13				7104						
16			105	291						
20				15067						
				243722						

*Flans*

1920	23	Acorn	107. 522 19	1921	7	Acorn	107. 522 19
1921	23	Acorn	107. 522 19	1922	7	Acorn	107. 522 19
1922	23	Acorn	107. 522 19	1923	7	Acorn	107. 522 19
1923	23	Acorn	107. 522 19	1924	7	Acorn	107. 522 19
1924	23	Acorn	107. 522 19	1925	7	Acorn	107. 522 19
1925	23	Acorn	107. 522 19	1926	7	Acorn	107. 522 19
1926	23	Acorn	107. 522 19	1927	7	Acorn	107. 522 19
1927	23	Acorn	107. 522 19	1928	7	Acorn	107. 522 19
1928	23	Acorn	107. 522 19	1929	7	Acorn	107. 522 19
1929	23	Acorn	107. 522 19	1930	7	Acorn	107. 522 19
1930	23	Acorn	107. 522 19	1931	7	Acorn	107. 522 19
1931	23	Acorn	107. 522 19	1932	7	Acorn	107. 522 19
1932	23	Acorn	107. 522 19	1933	7	Acorn	107. 522 19
1933	23	Acorn	107. 522 19	1934	7	Acorn	107. 522 19
1934	23	Acorn	107. 522 19	1935	7	Acorn	107. 522 19
1935	23	Acorn	107. 522 19	1936	7	Acorn	107. 522 19
1936	23	Acorn	107. 522 19	1937	7	Acorn	107. 522 19
1937	23	Acorn	107. 522 19	1938	7	Acorn	107. 522 19
1938	23	Acorn	107. 522 19	1939	7	Acorn	107. 522 19
1939	23	Acorn	107. 522 19	1940	7	Acorn	107. 522 19
1940	23	Acorn	107. 522 19	1941	7	Acorn	107. 522 19
1941	23	Acorn	107. 522 19	1942	7	Acorn	107. 522 19
1942	23	Acorn	107. 522 19	1943	7	Acorn	107. 522 19
1943	23	Acorn	107. 522 19	1944	7	Acorn	107. 522 19
1944	23	Acorn	107. 522 19	1945	7	Acorn	107. 522 19
1945	23	Acorn	107. 522 19	1946	7	Acorn	107. 522 19
1946	23	Acorn	107. 522 19	1947	7	Acorn	107. 522 19
1947	23	Acorn	107. 522 19	1948	7	Acorn	107. 522 19
1948	23	Acorn	107. 522 19	1949	7	Acorn	107. 522 19
1949	23	Acorn	107. 522 19	1950	7	Acorn	107. 522 19
1950	23	Acorn	107. 522 19	1951	7	Acorn	107. 522 19
1951	23	Acorn	107. 522 19	1952	7	Acorn	107. 522 19
1952	23	Acorn	107. 522 19	1953	7	Acorn	107. 522 19
1953	23	Acorn	107. 522 19	1954	7	Acorn	107. 522 19
1954	23	Acorn	107. 522 19	1955	7	Acorn	107. 522 19
1955	23	Acorn	107. 522 19	1956	7	Acorn	107. 522 19
1956	23	Acorn	107. 522 19	1957	7	Acorn	107. 522 19
1957	23	Acorn	107. 522 19	1958	7	Acorn	107. 522 19
1958	23	Acorn	107. 522 19	1959	7	Acorn	107. 522 19
1959	23	Acorn	107. 522 19	1960	7	Acorn	107. 522 19
1960	23	Acorn	107. 522 19	1961	7	Acorn	107. 522 19
1961	23	Acorn	107. 522 19	1962	7	Acorn	107. 522 19
1962	23	Acorn	107. 522 19	1963	7	Acorn	107. 522 19
1963	23	Acorn	107. 522 19	1964	7	Acorn	107. 522 19
1964	23	Acorn	107. 522 19	1965	7	Acorn	107. 522 19
1965	23	Acorn	107. 522 19	1966	7	Acorn	107. 522 19
1966	23	Acorn	107. 522 19	1967	7	Acorn	107. 522 19
1967	23	Acorn	107. 522 19	1968	7	Acorn	107. 522 19
1968	23	Acorn	107. 522 19	1969	7	Acorn	107. 522 19
1969	23	Acorn	107. 522 19	1970	7	Acorn	107. 522 19
1970	23	Acorn	107. 522 19	1971	7	Acorn	107. 522 19
1971	23	Acorn	107. 522 19	1972	7	Acorn	107. 522 19
1972	23	Acorn	107. 522 19	1973	7	Acorn	107. 522 19
1973	23	Acorn	107. 522 19	1974	7	Acorn	107. 522 19
1974	23	Acorn	107. 522 19	1975	7	Acorn	107. 522 19
1975	23	Acorn	107. 522 19	1976	7	Acorn	107. 522 19
1976	23	Acorn	107. 522 19	1977	7	Acorn	107. 522 19
1977	23	Acorn	107. 522 19	1978	7	Acorn	107. 522 19
1978	23	Acorn	107. 522 19	1979	7	Acorn	107. 522 19
1979	23	Acorn	107. 522 19	1980	7	Acorn	107. 522 19
1980	23	Acorn	107. 522 19	1981	7	Acorn	107. 522 19
1981	23	Acorn	107. 522 19	1982	7	Acorn	107. 522 19
1982	23	Acorn	107. 522 19	1983	7	Acorn	107. 522 19
1983	23	Acorn	107. 522 19	1984	7	Acorn	107. 522 19
1984	23	Acorn	107. 522 19	1985	7	Acorn	107. 522 19
1985	23	Acorn	107. 522 19	1986	7	Acorn	107. 522 19
1986	23	Acorn	107. 522 19	1987	7	Acorn	107. 522 19
1987	23	Acorn	107. 522 19	1988	7	Acorn	107. 522 19
1988	23	Acorn	107. 522 19	1989	7	Acorn	107. 522 19
1989	23	Acorn	107. 522 19	1990	7	Acorn	107. 522 19
1990	23	Acorn	107. 522 19	1991	7	Acorn	107. 522 19
1991	23	Acorn	107. 522 19	1992	7	Acorn	107. 522 19
1992	23	Acorn	107. 522 19	1993	7	Acorn	107. 522 19
1993	23	Acorn	107. 522 19	1994	7	Acorn	107. 522 19
1994	23	Acorn	107. 522 19	1995	7	Acorn	107. 522 19
1995	23	Acorn	107. 522 19	1996	7	Acorn	107. 522 19
1996	23	Acorn	107. 522 19	1997	7	Acorn	107. 522 19
1997	23	Acorn	107. 522 19	1998	7	Acorn	107. 522 19
1998	23	Acorn	107. 522 19	1999	7	Acorn	107. 522 19
1999	23	Acorn	107. 522 19	2000	7	Acorn	107. 522 19
2000	23	Acorn	107. 522 19	2001	7	Acorn	107. 522 19
2001	23	Acorn	107. 522 19	2002	7	Acorn	107. 522 19
2002	23	Acorn	107. 522 19	2003	7	Acorn	107. 522 19
2003	23	Acorn	107. 522 19	2004	7	Acorn	107. 522 19
2004	23	Acorn	107. 522 19	2005	7	Acorn	107. 522 19
2005	23	Acorn	107. 522 19	2006	7	Acorn	107. 522 19
2006	23	Acorn	107. 522 19	2007	7	Acorn	107. 522 19
2007	23	Acorn	107. 522 19	2008	7	Acorn	107. 522 19
2008	23	Acorn	107. 522 19	2009	7	Acorn	107. 522 19
2009	23	Acorn	107. 522 19	2010	7	Acorn	107. 522 19
2010	23	Acorn	107. 522 19	2011	7	Acorn	107. 522 19
2011	23	Acorn	107. 522 19	2012	7	Acorn	107. 522 19
2012	23	Acorn	107. 522 19	2013	7	Acorn	107. 522 19
2013	23	Acorn	107. 522 19	2014	7	Acorn	107. 522 19
2014	23	Acorn	107. 522 19	2015	7	Acorn	107. 522 19
2015	23	Acorn	107. 522 19	2016	7	Acorn	107. 522 19
2016	23	Acorn	107. 522 19	2017	7	Acorn	107. 522 19
2017	23	Acorn	107. 522 19	2018	7	Acorn	107. 522 19
2018	23	Acorn	107. 522 19	2019	7	Acorn	107. 522 19
2019	23	Acorn	107. 522 19	2020	7	Acorn	107. 522 19
2020	23	Acorn	107. 522 19	2021	7	Acorn	107. 522 19
2021	23	Acorn	107. 522 19	2022	7	Acorn	107. 522 19
2022	23	Acorn	107. 522 19	2023	7	Acorn	107. 522 19
2023	23	Acorn	107. 522 19	2024	7	Acorn	107. 522 19
2024	23	Acorn	107. 522 19	2025	7	Acorn	107. 522 19
2025	23	Acorn	107. 522 19	2026	7	Acorn	107. 522 19
2026	23	Acorn	107. 522 19	2027	7	Acorn	107. 522 19
2027	23	Acorn	107. 522 19	2028	7	Acorn	107. 522 19
2028	23	Acorn	107. 522 19	2029	7	Acorn	107. 522 19
2029	23	Acorn	107. 522 19	2030	7	Acorn	107. 522 19
2030	23	Acorn	107. 522 19	2031	7	Acorn	107. 522 19
2031	23	Acorn	107. 522 19	2032	7	Acorn	107. 522 19
2032	23	Acorn	107. 522 19	2033	7	Acorn	107. 522 19
2033	23	Acorn	107. 522 19	2034	7	Acorn	107. 522 19
2034	23	Acorn	107. 522 19	2035	7	Acorn	107. 522 19
2035	23	Acorn	107. 522 19	2036	7	Acorn	107. 522 19
2036	23	Acorn	107. 522 19	2037	7	Acorn	107. 522 19
2037	23	Acorn	107. 522 19	2038	7	Acorn	107. 522 19
2038	23	Acorn	107. 522 19	2039	7	Acorn	107. 522 19
2039	23	Acorn	107. 522 19	2040	7	Acorn	107. 522 19
2040	23	Acorn	107. 522 19	2041	7	Acorn	107. 522 19
2041	23	Acorn	107. 522 19	2042	7	Acorn	107. 522 19
2042	23	Acorn	107. 522 19	2043	7	Acorn	107. 522 19
2043	23	Acorn	107. 522 19	2044	7	Acorn	107. 522 19
2044	23	Acorn	107. 522 19	2045	7	Acorn	107. 522 19
2045	23	Acorn	107. 522 19	2046	7	Acorn	107. 522 19
2046	23	Acorn	107. 522 19	2047	7	Acorn	107. 522 19
2047	23	Acorn	107. 522 19	2048	7	Acorn	107. 522 19
2048	23	Acorn	107. 522 19	2049	7	Acorn	107. 522 19
2049	23	Acorn	107. 522 19	2050	7	Acorn	107. 522 19
2050	23	Acorn	107. 522 19	2051	7	Acorn	107. 522 19
2051	23	Acorn	107. 522 19	2052	7	Acorn	107. 522 19
2052	23	Acorn	107. 522 19	2053	7	Acorn	107. 522 19
2053	23	Acorn	107. 522 19	2054	7	Acorn	107. 522 19
2054	23	Acorn	107. 522 19	2055	7	Acorn	107. 522 19
2055	23	Acorn	107. 522 19	2056	7	Acorn	107. 522 19
2056	23	Acorn	107. 522 19	2057	7	Acorn	107. 522 19
2057	23	Acorn	107. 522 19	2058	7	Acorn	107. 522 19
2058	23	Acorn	107. 522 19	2059	7	Acorn	107. 522 19
2059	23	Acorn	107. 522 19	2060	7	Acorn	107. 522 19
2060	23	Acorn	107. 522 19	2061	7	Acorn	107. 522 19
2061	23	Acorn	107. 522 19	2062	7	Acorn	107. 522 19
2062	23	Acorn	107. 522 19	2063	7	Acorn	107. 522 19
2063	23	Acorn	107. 522 19	2064	7	Acorn	107. 522 19
2064	23	Acorn	107. 522 19	2065	7	Acorn	107. 522 19
2065	23	Acorn	107. 522 19	2066	7	Acorn	107. 522 19
2066	23	Acorn	107. 522 19	2067	7	Acorn	107. 522 19
2067	23	Acorn	107. 522 19	2068	7	Acorn	107. 522 19
2068	23	Acorn	107. 522 19	2069	7	Acorn	107. 522 19
2069	23	Acorn	107. 522 19	2070	7	Acorn	107. 522 19
2070	23	Acorn	107. 522 19	2071	7	Acorn	107. 522 19
2071	23	Acorn	107. 522 19	2072	7	Acorn	107. 522 19
2072	23	Acorn	107. 522 19	2073	7	Acorn	107.

## Model

1900	May	31	By Capt. Lane	124	9533	64	1900	May	31	By Balance	11170	90
	Apr	11	to Cash	53		190						
		19		59		25						
	May	11		49		1221						
		14		75		70451						
		31		18		592						
	June	22		95		51915						
	May	5	to Cash	26		118						
		6	to Cash	163		15						
		23		17		20						
	Dec	11		177		27075						
		20		144		225						
	May	10		195		29						
		11				7124						
		23		199		165						
		31		205		5650						
	Feb	6		207		611						
		21		215		555						
		24		217		582						
	May	6		221		53						
						75						
		7		224		737						
		21		229		265						
		27		233		21						
	July	12		243		2124						
	Aug	9		293		665						
	Oct	3		321		372						
						11170						
1900	Apr	1	By Balance				1900	June	30	By Balance	11170	90

## Rolls

1900	Mar 31	To Expense	124	1225 79	1902	Mar 31	By Balance	1607 96
Apr	26	to Cash	63	450				
	27		63	1263				
May	2		65	1568				
	4			2209				
	11		67	49				
			67	780				
	17		71	2021				
	18		73	499				
	21			1513				
	21		77	662				
June	24		79	2021				
	26	To B. B. W.	16	13102				
				1607 96	1902	June 30	By Balance	1607 96
1902	May 1	To Balance		1607 96				

## The Edwards P. Allen Co. - Subscribed &amp; Paid

1900	Mar 31	To Cash	147 6555 55	1902	Mar 31	By Cash	73 141 55
Apr	5		27 78 11 45			to Cash	73 5920 00
May	21		215 7000 00				
	15		225 7000 00				
			1 5000 00				
	27		23 1500 00				
May	7	to Cash	41 141 55				
	15	to Cash	219 5933 00				
Oct	11		323 2650 42				
	22	to Cash	64 69 19				
1902	July 9	to Cash	317 5072 39				
			5934 1 55				5934 1 55

1902	May 27	To Cash	428 319 33	1902	May 31	By Cash	324 365 79
June	26	to Cash	96 46 46		July 14		34 54 52
July	25	to Cash	99 54 52				
			420 31				420 31
Aug	26	To Cash	114 24 00		Nov 15	By Cash	57 24 00



## Roaster

1900 Month	11	2, Eggs & Chicks	12	11551.64	1900 May	11	2, And forward	21	14760.22
Apr	1	1, 1st & 2nd	13	4.51					
	11	band	13	150.19					
				296.61					
				100.99					
				100.40					
			55	3.49					
				99					
				124					
				2.73					
				147.50					
				100.00					
	12			67.96					
				52.36					
				0.09					
				5.41					
				245.42					
				10.00					
	16		74	1.24					
				7.92					
	19			5.40					
				1.52					
	16			17.21					
	19		59	3.60					
				11.10					
				1.22					
				9.90					
				112.24					
				1.97					
				2.11					
	23		61	7.05					
				12.74					
				1.97					
	26			10.23					
			63	12.27					
	27			17.40					
			65	14.65					
	2			15.47					
	4			23.14					
	7		67	130.14					
	10			15.10					
	11			29.15					
				2.20					
			69	2.92					
				147.60.22					

## Roaster

1900 Month	11	2, And forward	14760.22	1900 June	13	2, band	15	15.15
May	1	band	59	4.69	21	band	15	15.15
				35.57				
				89.98				
				124.57				
	14			6.47				
	17		71	1.67				
				20.21				
	18		73	19.12				
				150.06				
				1427.14				
	19		75	67.24				
				5.75				
				44.05				
				44.00				
				8.09				
				13.00				
				106.40				
	21			43.5				
			77	32.10				
				21.30				
				92.40				
				36.11				
	24	2, Eggs & Chicks	101	7.40				
	29	band	77	25.70				
			77	18.55				
	30		81	60.40				
	31		81	115.43				
June	6		85	10.41				
				25.77				
				64.68				
				4.70				
	7		77	49.76				
	12			29.24				
				43.56				
				15.29				
				22.61				
	13			3.46				
				47.42				
	16		91	16.95				
				1.01				
	21		93	21.36				
				2.61				
				2.2				
				14960.31				

## Roaster,

1900	June	21	22	23	24	25	26	27	28	29	30	July	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Aug	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Sept	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Oct	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Nov	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Dec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

Rooster

1901	10	2	Ans for	212	23153	43	1901	25	Ans for	50	24490	20
1902	12		Book	145	359		1902	26	Ans for			
					71							
				1471	194							
				1494	243							
	24			1551	194	96						
	29				239							
1903	5			1631	710							
	12			171	955							
	23				50							
1904	11			1771	15							
	20			1841	216							
1905	9			191	15							
					2495							
	11			195	702							
	16				1014							
					315							
	25			201	156							
	31			203	645							
1906	2			207	2424							
	6			209	3395							
	8			211	110							
					45							
	15			213	1567							
	21			215	30							
	26				1500							
				217	5049							
					3260							
1907	6			221	606							
				223	60							
	7				27							
	1				20620							
	9				2227							
	16			227	281							
					160							
	21			229	60							
					60							
	27			233	224							
	12			237	623							
1908	1			239	247							
	7			241	210							
					240							
	25			243	2956							
	26			245	31							
					244020							



## Experiments

May	31	27	Exp. 2	12.5723	47	100	6	Exp. 1	12.5723	47	100	40	51
Apr	11		Lead	531	779		12	Exp. 2	12.5723	47	100	40	51
	12			531	779		12	Exp. 2	12.5723	47	100	40	51
	14			591	190		12	Exp. 2	12.5723	47	100	40	51
May	15			671	150		12	Exp. 2	12.5723	47	100	40	51
	15			731	2077		12	Exp. 2	12.5723	47	100	40	51
June	16			951	10541		12	Exp. 2	12.5723	47	100	40	51
July	16			105	240		12	Exp. 2	12.5723	47	100	40	51
Aug	31			151	90		12	Exp. 2	12.5723	47	100	40	51
Oct	24			155	30		12	Exp. 2	12.5723	47	100	40	51
Nov	24		Shunt	154	930		12	Exp. 2	12.5723	47	100	40	51
Dec	12		Exp. 2	155	26240		12	Exp. 2	12.5723	47	100	40	51
Jan	19		Shunt	154	77		12	Exp. 2	12.5723	47	100	40	51
	21		Exp. 2	194	7995		12	Exp. 2	12.5723	47	100	40	51
	25		Lead	201	24		12	Exp. 2	12.5723	47	100	40	51
Feb	1		Exp. 2	401	16423		12	Exp. 2	12.5723	47	100	40	51
	11		Shunt	411	614		12	Exp. 2	12.5723	47	100	40	51
	25		Exp. 2	441	4649		12	Exp. 2	12.5723	47	100	40	51
Mar	1		Shunt	441	22		12	Exp. 2	12.5723	47	100	40	51
	1		Exp. 2	451	4125		12	Exp. 2	12.5723	47	100	40	51
Apr	23		Exp. 2	471	2079		12	Exp. 2	12.5723	47	100	40	51
June	1			501	11171		12	Exp. 2	12.5723	47	100	40	51
	12		Shunt	511	794		12	Exp. 2	12.5723	47	100	40	51
	24		Exp. 2	511	52745		12	Exp. 2	12.5723	47	100	40	51
July	6			521	745535		12	Exp. 2	12.5723	47	100	40	51
	9		Shunt	531	1939		12	Exp. 2	12.5723	47	100	40	51
	24		Exp. 2	541	10154		12	Exp. 2	12.5723	47	100	40	51
Aug	1			541	19171		12	Exp. 2	12.5723	47	100	40	51
	1		Shunt	541	462		12	Exp. 2	12.5723	47	100	40	51
Oct	12		Exp. 2	631	775123		12	Exp. 2	12.5723	47	100	40	51
	23			631	11133		12	Exp. 2	12.5723	47	100	40	51
Nov	11			651	11133		12	Exp. 2	12.5723	47	100	40	51
Dec	21			711	11133		12	Exp. 2	12.5723	47	100	40	51
Jan	10			741	2460		12	Exp. 2	12.5723	47	100	40	51
	23			771	1379		12	Exp. 2	12.5723	47	100	40	51
Mar	31		Lead	8921	11133		12	Exp. 2	12.5723	47	100	40	51
Apr	1	27	Shunt	10239	771		12	Exp. 2	12.5723	47	100	40	51
	25		Exp. 2	101	455		12	Exp. 2	12.5723	47	100	40	51
May	9		Exp. 2	501	11133		12	Exp. 2	12.5723	47	100	40	51
	27		Exp. 2	911	425		12	Exp. 2	12.5723	47	100	40	51
June	10			941	11133		12	Exp. 2	12.5723	47	100	40	51
	12		Shunt	951	09		12	Exp. 2	12.5723	47	100	40	51
	15		Lead	951	11133		12	Exp. 2	12.5723	47	100	40	51
				115272			12	Exp. 2	12.5723	47	100	40	51

## Experiments

June	15	30	Exp. 2	410	115272		12	Exp. 2	12.5723	47	100	40	51
	27		Lead	421	162		12	Exp. 2	12.5723	47	100	40	51
July	1		Exp. 2	971	11133		12	Exp. 2	12.5723	47	100	40	51
	10		Shunt	971	69		12	Exp. 2	12.5723	47	100	40	51
	12		Lead	971	4760		12	Exp. 2	12.5723	47	100	40	51
	23		Exp. 2	991	2541		12	Exp. 2	12.5723	47	100	40	51
Aug	5		Lead	931	129320		12	Exp. 2	12.5723	47	100	40	51
	9		Exp. 2	1011	6042		12	Exp. 2	12.5723	47	100	40	51
	11		Shunt	1022	01		12	Exp. 2	12.5723	47	100	40	51
	25		Exp. 2	1051	455		12	Exp. 2	12.5723	47	100	40	51
Sept	1		Lead	1091	11133		12	Exp. 2	12.5723	47	100	40	51
Oct	5		Exp. 2	1121	236413		12	Exp. 2	12.5723	47	100	40	51
Nov	23		Exp. 2	1201	5252		12	Exp. 2	12.5723	47	100	40	51
Dec	2		Lead	1111	11133		12	Exp. 2	12.5723	47	100	40	51
Jan	24		Exp. 2	1291	11133		12	Exp. 2	12.5723	47	100	40	51
Feb	20		Shunt	1331	11133		12	Exp. 2	12.5723	47	100	40	51
Mar	23		Lead	701	11133		12	Exp. 2	12.5723	47	100	40	51
Apr	1			122	125		12	Exp. 2	12.5723	47	100	40	51
May	1			141	250		12	Exp. 2	12.5723	47	100	40	51
	14		Shunt	1451	5491		12	Exp. 2	12.5723	47	100	40	51
	1		Lead	1501	2290		12	Exp. 2	12.5723	47	100	40	51
	11		Exp. 2	1471	412		12	Exp. 2	12.5723	47	100	40	51
June	5		Lead	171	11133		12	Exp. 2	12.5723	47	100	40	51
	1		Shunt	1501	6218		12	Exp. 2	12.5723	47	100	40	51
	9		Exp. 2	1571	2017		12	Exp. 2	12.5723	47	100	40	51
	11		Lead	1491	751		12	Exp. 2	12.5723	47	100	40	51
	1		Shunt	1521	1611		12	Exp. 2	12.5723	47	100	40	51
	19		Lead	911	1921		12	Exp. 2	12.5723	47	100	40	51
	23		Shunt	1551	6721		12	Exp. 2	12.5723	47	100	40	51
	24		Exp. 2	1561	9444		12	Exp. 2	12.5723	47	100	40	51
				115272			12	Exp. 2	12.5723	47	100	40	51

## Patterns

1900	March	5	By Sigsbee	12	273.15	1900	July	1	of Sigsbee	10	161.60
April	11		band	53	120	Aug	1		Bascom	27	2012.01
					1770						
	19			57	330						
					335						
				59	125						
	26			61	745						
				63	300						
May	2			65	140						
	8			66	1430						
	11			69	1221						
					263						
	14			71	153						
				73	375						
	27			79	89.05						
				74	140						
June	31			83	266						
	7			87	62						
	13			89	375						
	21			95	240						
	22			97	1040						
	29			99	720						
	30				591						
July	6			101	412						
	12			103	120						
	13				5365						
					967						
					943						
	16			105	80						
	20				165						
	26			107	245						
	31			109	8707						
					6673						
					210						
Aug	8			111	420						
	9			115	1054						
					167						
	17			117	50						
					195						
	31			123	200						
					140						
				127	1121						
				131	66909						
	1			133	2172						
					120						
					2173.61						

2173.61

## Patterns

1901	Feb	1	3	Bascom	211	2012.01	1901	Aug	7	of Sigsbee	359	6437
		12		band	133	6352	Aug	9		band	2304	10
					135	4647	June	7		Bascom	210	7033
	10				150	540						
	27				155	766						
						114.11						
						549						
	30				159	225						
Nov	5				163	3459						
	6					53						
	7					5639						
					165	321						
	22				171	55270						
	23					75						
						75						
	10				177	481.35						
	11					4294						
	25				183	64234						
						15						
1901	Jan	31			185	121.4						
		9			191	407.05						
						30						
	10				195	212						
	11					42404						
	23				199	5316						
	25				201	27601						
					203	210						
	14				213	877.24						
	21				215	75						
						30						
	26				217	10612						
	6				221	570.15						
	7				223	41721						
					225	606						
	21				229	30						
	27				233	6325.85						
	30				235	645						
April	6				239	2596						
	29				247	400						
	30				249	146						
May	24				251	650.55						
	14				257	15370						
						9005						
	17					25						
					259	60						
						7099.75						

7099.75

*Patrons*

1901	Jan 17	30	Banned	219,703.51	1901	Jan 11	By Balance	10303.47
	20	.	Good	2751,350.75				
July	12	.	.	2751,350.40				
Aug	9	.	.	2751,350.00				
	22	.	.	2791,514				
	.	.	.	3011,10.00				
	.	.	.	3011,33.75				
Oct	3	.	.	321,338.30				
	21	.	.	321,25				
	29	.	.	329,3.00				
Nov	7	.	.	335,11.50				
	.	.	.	307.43				
Dec	13	.	.	300,90.00				
	.	.	.	20				
1902	7	.	.	371,654.91				
Aug	7	.	.	371,375.05				
	29	.	.	375,332.50				
Feb	1	.	.	377,10.51.00				
	15	.	.	381,20.00				
	20	.	.	383,10.00				
				10303.47				
1902	Jan 1	30	Banned	10303.47	1902	Jan 30	By Balance	10326.01
	2	.	Good	1,102.29				
Jan	15	.	.	10326.01				
				10326.01				



## Comyors

1900	16	2	Ameyford	228	4831.65	1910	24	2	Exphment	228	6413	640
May	19		Back	154	375	May	19		Back	228	6413	641
	20			154	113							
					5.58							
					10.95							
					5.75							
	24			154	377.51							
					5.80							
	24				22.82							
					10.36							
					23.04							
	38			174	4.06							
					2.83							
May	5		Flowerdew, 8th	26	270.51							
			Back	163	4.95							
	6				14.99							
	7			163	100.65							
					13							
	7			107	12.99							
					21.17							
					4.90							
					24.30							
	22				9.44							
				171	549.16							
	23				16.95							
					26.64							
	27			171	24.75							
Dec				175	27.22							
	4				54.13							
	10			177	21.90							
	11				630.65							
	15			179	2.01							
					4.03							
	20			184	40.61							
					48.62							
	21			184	1.54							
	25				54.32							
	31			185	2.10							
May	9			191	25.71							
					26.50							
					44.56							
	10			193	13							
					17.93							
					3.72							
					6419.69							
					</							

## Comyors

1911	10	2	Drummond	6073.69	1911	16	2	Ameyford	10359.32
1911			Back	194					



## Bagging Machine)

1900	Nov 21	To Exp. Chmng	124	1271	1901	Jan 21	By Exp. Chmng	124	330
Apr	11	bal	534	170	1901	Jan 21	By Bal	170	2007 54
	16		574	1176					
	19		594	190					
				231					
	30		634	133					
May	11		694	144					
	14		744	6310					
	19		754	122					
				1537					
June	12		774	60					
	21		904	133					
	22		954	15401					
July	13		1034	134					
	16		1054	201					
	31		1094	15401					
Aug	17		1174	1170					
	31		1234	1170					
				60					
				1314	30027				
Oct	29		1574	1515					
				2010 64					
1901	Apr 1	To Bal	2007 54	1901	Jan 21	By Bal	2007 54	1901	2007 54

## Screens

1900	May	31	By Exp'd Screen	124	269.50	1900	May	31	By Balance	866.61
Apr	12		Bad	554	66.52					
May	14			744	160.31					
May	30			444	2.53					
June	21			934	33					
	22			954	41					
Aug	31			1234	59					
Sept	20			1374	6.50					
May	22			1714	50					
1901	28			1994	40					
May	6			2094	43.5					
May	21			2154	60					
May	7			2234	17					
	27			2334	62					
June	26			2734	74					
					866.62					866.62
1902	Apr	1	By Balance		866.62	1903	Jan	30	By Bad L L	866.92
June	13		Bad	12	31					866.92
					866.92					866.92

## Blower

May	31	By Capt's Charge	124	270.40	1976	31	By Capt's Charge	1776.71
May	24	" bank	27	10.39				
June	7	"	79	20.21				
	13	"	79	35.12				
	21	Off. B. M. H.	79	72.93				
		bank	16	39.12				
			94	2.25				
	22	"	95	46.77				
	29	"	97	20.53				
July	6	"	99	42.45				
	12	"	101	79.96				
	13	"	103	47.75				
	20	"	103	16.78				
	25	"	105	24.65				
	31	"	107	37.40				
			109	291.55				
			111	51.46				
Aug	8	"	113	112.42				
	9	"	115	14.90				
	17	"	117	5.25				
	22	"	119	6.29				
	31	"	123	86.4				
				1.15				
Sept	6	"	124	247.47				
	12	"	133	7.40				
				5.4				
	14	"	135	9.17				
	20	"	137	6.53				
	26	"	139	165.57				
			141	6.66				
				4.52				
Oct	10	"	145	155.64				
				4.76				
				5.42				
	12	"		7.14				
	19	"	147	4.50				
	24	"	151	6.57				
	30	"	153	706.62				
			155	6.57				
				5.42				
Nov	6	"	163	172.85				
	12	"	171	13.09				
	20	"		3.54				
	30	"		10.64				
			173	1760.56				
				1776.71				

1776.71

## Blower

May	1	By Capt's Charge	250	1776.71	1976	31	By Capt's Charge	1776.71
May	4	" bank	175	5.25				
	20	"	177	17.47				
				6.97				
	25	"	179	17.93				
June	9	"	181	7.342				
				2.43				
	11	"	183	27.77				
	25	"	201	10.75				
	31	"	203	1.25				
July	7	"	221	17.53				
	21	"	223	5.63				
			225	12.61				
				166.54				
Aug	1	By Capt's Charge	166.54	166.54	1976	31	By Capt's Charge	166.54
				166.54				

## Coal Grinding

1910	12	3	bar	1051	4126	1910	25	2 of 100	2434.56
12	13				1672				
					109.06				
					12.12				
	20			1051	25.14				
	26			1071	1406				
	31			1091	35.87				
					392.56				
					25.69				
Aug	2			1131	11.15				
	7				34.45				
	9			1151	20.53				
	17				40.67				
				1171	11.57				
					33.20				
	22			1191	90				
	24				33.04				
				1211	7.64				
					5.49				
				1231	73.71				
	31				43.72				
				1251	3.01				
					1.44				
					5.34				
				1271	7.18				
					5.25				
					15.31				
					22.50				
				1291	42.50				
					40.49				
				1311	34.54				
Apr	6				310.65				
	12			1331	35.12				
					4.30				
					7.00				
					2.42				
				1351	34.47				
	14				24.24				
	20			1371	74.14				
	25				5.14				
				1391	2.40				
					27.11				
					43.30				
					55.10				
					244.66				
									2434.56

## Coal Grinding

1910	15	2	100	222.23	4.12	1910	25	2 of 100	5190.12
1910	15	2	100	222.23	4.12	1910	25	2 of 100	5190.12
				129	8.70				
	29			1411	29.19				
Oct	4			1431	31.82				
					11.74				
	10			1451	37.90				
					41.56				
	12			1471	156.40				
					127.65				
					7.65				
	13			1491	24.72				
				1511	1.77				
	16				27.47				
					208.32				
	19				29.55				
	20			1531	33.02				
					10.71				
					10.1				
					21.04				
					3.69				
					1.00				
					3.09				
					4.46				
	24			1551	74.02				
	29				12.0				
					12.28				
					17.64				
					3.37				
					3.72				
					11.60				
					6.00				
	30			1571	25.14				
					3.34				
					136.47				
Nov	5	100	222.23	244.66	4.12				
				1611	7.50				
				1631	17.19				
					3.00				
					17.4				
					16.69				
					250.00				
	6				20.44				
	7				34.15				
					5190.12				



Stone

1900	27	2. Day chd	22.4	277.14	1900	27	2. Day chd	22.4	277.14
Aug	1	"	23.1	374.65	Aug	1	"	23.1	374.65
	17	"	"	7.13		17	"	"	7.13
	22	Day chd	24.1	253.99		22	Day chd	24.1	253.99
Oct	1	"	"	375.21		1	"	"	375.21
	20	"	25.1	163		20	"	"	163
	23	Day chd	"	309.00		23	Day chd	"	309.00
Nov	1	Day chd	26.1	367.64		1	Day chd	26.1	367.64
	14	"	27.1	167		14	"	"	167
	20	Day chd	27.1	755.5		20	Day chd	27.1	755.5
Dec	6	Day chd	29.1	222.2		6	Day chd	29.1	222.2
	10	"	"	19		10	"	"	19
	22	Day chd	31.1	24.54		22	Day chd	31.1	24.54
1901	12	"	35.5	313.5		12	"	35.5	313.5
Feb	21	"	39.1	15.64		21	"	39.1	15.64
	25	"	40.1	69.65		25	"	40.1	69.65
Mar	25	"	44.1	19.27		25	"	44.1	19.27
	28	"	45.1	60.72		28	"	45.1	60.72
	28	"	"	236.05		28	"	"	236.05
April	2	Good	46.1	100		2	Good	46.1	100
	10	Day chd	46.1	177.6		10	Day chd	46.1	177.6
	23	"	47.1	113.75		23	"	47.1	113.75
May	9	"	48.1	7.50		9	"	48.1	7.50
	24	"	49.1	9.20		24	"	49.1	9.20
June	1	"	50.1	24.52		1	"	50.1	24.52
	24	"	51.1	9.66		24	"	51.1	9.66
July	7	Day chd	52.1	21.01		7	Day chd	52.1	21.01
	16	"	53.1	16.20		16	"	53.1	16.20
Aug	11	"	55.1	19.97		11	"	55.1	19.97
	23	"	59.1	97.22		23	"	59.1	97.22
Dec	9	Day chd	70.1	24.54		9	Day chd	70.1	24.54
1902	21	"	71.1	33.56		21	"	71.1	33.56
Feb	10	"	74.1	69.50		10	"	74.1	69.50
	23	"	77.1	91.44		23	"	77.1	91.44
Mar	1	"	78.1	107.36		1	"	78.1	107.36
	24	"	81.1	75.14		24	"	81.1	75.14
May	1	"	"	34.45		1	"	"	34.45
	24	"	83.1	64.44		24	"	83.1	64.44
				3282.83					3282.83

3602.07

Stone

1901	1	2. Balanced	25.4	5596.95	1901	12	2. Day chd	55.4	17.09
April	10	Day chd	26.1	157.54	April	10	Day chd	56.1	37.47
	25	"	27.1	47.24		25	"	57.1	37.47
				3501.51					3501.51

3501.11  
12.09  
374.72

625 107 3000 0 115  
 1150 3000 1150  
 3000 1150  
 3000 1150

Shelburne Building Supply Co. Shelburne

May 2	2	3000	1150
May 3	9	1050	
May 4	10	807.45	
May 5	11	173.25	
May 6	13	829.40	
May 7	20	184.26	
May 8	20	184.26	
May 9	20	184.26	
May 10	20	184.26	
May 11	20	184.26	
May 12	20	184.26	
May 13	20	184.26	
May 14	20	184.26	
May 15	20	184.26	
May 16	20	184.26	
May 17	20	184.26	
May 18	20	184.26	
May 19	20	184.26	
May 20	20	184.26	
May 21	20	184.26	
May 22	20	184.26	
May 23	20	184.26	
May 24	20	184.26	
May 25	20	184.26	
May 26	20	184.26	
May 27	20	184.26	
May 28	20	184.26	
May 29	20	184.26	
May 30	20	184.26	
May 31	20	184.26	
May 32	20	184.26	
May 33	20	184.26	
May 34	20	184.26	
May 35	20	184.26	
May 36	20	184.26	
May 37	20	184.26	
May 38	20	184.26	
May 39	20	184.26	
May 40	20	184.26	
May 41	20	184.26	
May 42	20	184.26	
May 43	20	184.26	
May 44	20	184.26	
May 45	20	184.26	
May 46	20	184.26	
May 47	20	184.26	
May 48	20	184.26	
May 49	20	184.26	
May 50	20	184.26	
May 51	20	184.26	
May 52	20	184.26	
May 53	20	184.26	
May 54	20	184.26	
May 55	20	184.26	
May 56	20	184.26	
May 57	20	184.26	
May 58	20	184.26	
May 59	20	184.26	
May 60	20	184.26	
May 61	20	184.26	
May 62	20	184.26	
May 63	20	184.26	
May 64	20	184.26	
May 65	20	184.26	
May 66	20	184.26	
May 67	20	184.26	
May 68	20	184.26	
May 69	20	184.26	
May 70	20	184.26	
May 71	20	184.26	
May 72	20	184.26	
May 73	20	184.26	
May 74	20	184.26	
May 75	20	184.26	
May 76	20	184.26	
May 77	20	184.26	
May 78	20	184.26	
May 79	20	184.26	
May 80	20	184.26	
May 81	20	184.26	
May 82	20	184.26	
May 83	20	184.26	
May 84	20	184.26	
May 85	20	184.26	
May 86	20	184.26	
May 87	20	184.26	
May 88	20	184.26	
May 89	20	184.26	
May 90	20	184.26	
May 91	20	184.26	
May 92	20	184.26	
May 93	20	184.26	
May 94	20	184.26	
May 95	20	184.26	
May 96	20	184.26	
May 97	20	184.26	
May 98	20	184.26	
May 99	20	184.26	
May 100	20	184.26	

May 16	16	315.00	
May 17	17	315.00	
May 18	18	315.00	
May 19	19	315.00	
May 20	20	315.00	
May 21	21	315.00	
May 22	22	315.00	
May 23	23	315.00	
May 24	24	315.00	
May 25	25	315.00	
May 26	26	315.00	
May 27	27	315.00	
May 28	28	315.00	
May 29	29	315.00	
May 30	30	315.00	
May 31	31	315.00	
May 32	32	315.00	
May 33	33	315.00	
May 34	34	315.00	
May 35	35	315.00	
May 36	36	315.00	
May 37	37	315.00	
May 38	38	315.00	
May 39	39	315.00	
May 40	40	315.00	
May 41	41	315.00	
May 42	42	315.00	
May 43	43	315.00	
May 44	44	315.00	
May 45	45	315.00	
May 46	46	315.00	
May 47	47	315.00	
May 48	48	315.00	
May 49	49	315.00	
May 50	50	315.00	
May 51	51	315.00	
May 52	52	315.00	
May 53	53	315.00	
May 54	54	315.00	
May 55	55	315.00	
May 56	56	315.00	
May 57	57	315.00	
May 58	58	315.00	
May 59	59	315.00	
May 60	60	315.00	
May 61	61	315.00	
May 62	62	315.00	
May 63	63	315.00	
May 64	64	315.00	
May 65	65	315.00	
May 66	66	315.00	
May 67	67	315.00	
May 68	68	315.00	
May 69	69	315.00	
May 70	70	315.00	
May 71	71	315.00	
May 72	72	315.00	
May 73	73	315.00	
May 74	74	315.00	
May 75	75	315.00	
May 76	76	315.00	
May 77	77	315.00	
May 78	78	315.00	
May 79	79	315.00	
May 80	80	315.00	
May 81	81	315.00	
May 82	82	315.00	
May 83	83	315.00	
May 84	84	315.00	
May 85	85	315.00	
May 86	86	315.00	
May 87	87	315.00	
May 88	88	315.00	
May 89	89	315.00	
May 90	90	315.00	
May 91	91	315.00	
May 92	92	315.00	
May 93	93	315.00	
May 94	94	315.00	
May 95	95	315.00	
May 96	96	315.00	
May 97	97	315.00	
May 98	98	315.00	
May 99	99	315.00	
May 100	100	315.00	

## Store Storm

12 <sup>th</sup> 12 <sup>th</sup> 2 <sup>nd</sup> 12 <sup>th</sup>	12 <sup>th</sup> 2 <sup>nd</sup> 12 <sup>th</sup> 12 <sup>th</sup>	77 4354.41	17 17 12 <sup>th</sup> 12 <sup>th</sup>	28 10419.53
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	155 1199	" " 12 <sup>th</sup> 12 <sup>th</sup>	21 5374.05
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	127.02		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	1512		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	120.4		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	436		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	182.5		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	29.7		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	64.5		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	19.3		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	22.5		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	42.12		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	3.4		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	46.11		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	57.5		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	139 34.5		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	4.5		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	19.4		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	14.1		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	75.41		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	392		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	4.6		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	14.1		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	22.6		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	9.51		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	10.4		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	109.6		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	307.84		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	9.43		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	79.25		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	14.5		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	21.5		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	2.47		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	12.65		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	175.03		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	91.53		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	14.0		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	10.96		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	132.62		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	75.49		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	13.56		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	4.27		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	149.1		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	55.46		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	1.25		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	2.7		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	15.5		
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	6553.5		

6553.5

## Store Storm

12 <sup>th</sup> 12 <sup>th</sup> 2 <sup>nd</sup> 12 <sup>th</sup>	12 <sup>th</sup> 2 <sup>nd</sup> 12 <sup>th</sup> 12 <sup>th</sup>	240 5584.03	28 10419.53
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	149.1 2.07	21 5374.05
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	305.14	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	429	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	10.5	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	157.1 49.69	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	120.42	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	6.37	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	1.12	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	5.44	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	153.1 25	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	163.55	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	70.56	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	102.96	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	124.55	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	109.4	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	39.70	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	150.6	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	25.41	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	94.66	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	6.97	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	6.33	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	155.1 5.18	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	14.75	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	25.1 126.52	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	155.1 297.32	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	6.110	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	1.52	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	32.69	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	131.67	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	13.67	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	17.03	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	63.49	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	2.79	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	4.65	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	9.50	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	22.64	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	6.71	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	6.12	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	159.1 22.51	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	3.40	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	3.40	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	161.1 71.27	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	56	
" " 12 <sup>th</sup> 12 <sup>th</sup>	" " 12 <sup>th</sup> 12 <sup>th</sup>	7529.48	

7529.48



## Shed Storm

1972	5	3	Base	241	612	96	1972	14	By	Shed	27	1505	90
			Base	161	1274				Shed	Base	27	6029	15
					902								
					532								
					427								
					779								
					445								
					704								
				103	549								
					336								
6					212	30							
					200								
7				115	1027								
					1071								
					493								
					420								
					5394								
					1372								
					526								
					1024								
					1050								
					1041								
					4251								
8	By	Shed		26	152	91							
	Base			117	1565								
					1384								
					113								
					5246								
					5771								
					5600								
17					7311								
					3173								
					5054								
				109	160								
					1144								
					2065								
					5442								
					270								
					103								
					2441								
					42140								
20	By	Shed		27	1509	91							
22	Base			109	173	566							
					3101								
					7035	95							

703575

## Shed Storm

1972	22	33	Base	6029	15	1972	10	2	Base	29	12089	75
			Base	147	637				Base	29	4056	00
					671							
					4290							
					416							
				711	1549							
					655							
					1791							
					711							
27				173	672							
30					514	517						
					655							
Dec	1			175	615	515						
					5664							
					1015							
					346							
					854							
					2049							
					695							
					31545							
					9771							
6		By	Shed	29	2446							
10			Base	175	7159							
					986							
					539							
					3450							
					2446							
				177	1106							
					953							
					2535							
					250							
					1542							
					947							
					2025							
					847							
					414							
					600							
					2007							
					2524							
15				177	3145							
					6394							
					454							
					779							
					1465							
					1452							
					7205	74						

720574





## Store Norm

1901 May	21-23, Basman	1901 May	25	1901 May	25	1901 May	25	1901 May	25
	bad	147	7920	147	1663	147	1663	147	1663
					1246				
					999				
					24587				
					1724				
					3704				
					544				
					1467				
					916				
					1590				
					411				
					356				
					24				
					607				
					2617				
	dog head				6143				
	bad				196				
					390				
					637				
					261				
					4300				
					440				
					20566				
					876				
					3242				
					22424				
					403				
					3295				
					7013				
					1136				
					1615				
					5696				
					444				
					914				
					1441				
					900				
					7129				
					954				
					7604				
					3320				
					2247				
					120				
					1095				
					950513				

940513

## Store Norm

1901 May	21-23, Basman	1901 May	25	1901 May	25	1901 May	25	1901 May	25
	bad	147	7920	147	1663	147	1663	147	1663
					1246				
					999				
					24587				
					1724				
					3704				
					544				
					1467				
					916				
					1590				
					411				
					356				
					24				
					607				
					2617				
	dog head				6143				
	bad				196				
					390				
					637				
					261				
					4300				
					440				
					20566				
					876				
					3242				
					22424				
					403				
					3295				
					7013				
					1136				
					1615				
					5696				
					444				
					914				
					1441				
					900				
					7129				
					954				
					7604				
					3320				
					2247				
					120				
					1095				
					950513				

9160513



## Gardes &amp; Railways

1901	17	2	Batman	251	5499	100	1901	9	of	Pay	due	144	7	05
19			bad	241	2501		10	6				52	4	20
23			Pay due	171	231	35	24					53	3	45
26			bad	243	5004		12		Batman			253	9007	12
29				247	650									
					755									
May	9		Pay due	441	367	93								
10			bad	255	325									
11			Shut down	491	26	91								
			bad	257	520									
17				259	6465									
24			Pay due	491	579	72								
27			bad	261	475									
June	7			265	195									
10			Pay due	50	244	43								
12			Shut down	51	114	40								
17			bad	269	765									
24			Pay due	51	293	20								
26			bad	275	134	25								
27					250									
July	6		Pay due	62	449	97								
9			Shut down	53	45	59								
11			bad	241	515									
12					26	24								
24			Pay due	53	531	44								
31			bad	243	650									
Aug	1		Pay due	54	1230	07								
			Shut down		40	10								
2			bad	249	13	04								
5				299	126	49								
6				291	61	26								
9				293	580									
12				295	19	59								
16				297	14	66								
16				297	79	10								
21					55									
23			Pay due	57	709	34								
24			bad	303	59	75								
30				307	65	79								
					57	62								
Sept	6			309	11	00								
7			Pay due	54	500	47								
10			Shut down	59	23	77								
12			bad	311	364									
					8903	42								

## Gardes &amp; Railways

1901	12	2	Batman	252	9001	972	1901	16	of	Pay	due	59	24	33
20			bad	313	525		12					62	520	
16			Pay due	59	543	66	23					62	255	
24			bad	313	2220		31		Shut down			37	35	
26				315	100	96	31		Pay due			65	46	65
					54	93	28					69	376	
				317	23	08	21					72	51	92
Aug	10		Shut down	62	30	72	10					74	5	75
12			Pay due	63	55	15	14		Batman			254	954	19
21			bad	325	246	1								
				327	1175									
23			Pay due	63	514	25								
27			bad	327	67	53								
Am	1			329	72	06	10							
				331	275									
					113	42								
6				333	545									
7				335	49	49								
11			Pay due	65	45	67								
12			Shut down	66	71	64								
14			bad	337	94	27								
				339	67	50								
					27	31								
15				341	2	00								
22				343	9	90								
23			Pay due	69	320	24								
27			bad	345	8	09								
				345	265									
				347	530									
30				349	6	65								
Sept	5			70	342	32								
9			Pay due	71	55	71								
11			Shut down	350	68	70								
			bad	353	49	12								
21			Pay due	71	407	75								
23			bad	357	1	50								
3				361	76	44								
					154	40								
				365	79	2								
6					50	72								
					32	15								
10			Pay due	72	69	41								
14			bad	367	46	32								
				369	44	50								
					95470	99								



## Yards &amp; Railways

1902	25	Boat	255 107 150 49	1903	25	Boat	255 107 150 49
26	Boat	450	2460	26	Boat	450	2460
27	Boat	112 7	229 6 36	27	Boat	112 7	229 6 36
28	Boat	58	8 91	28	Boat	58	8 91
29	Boat	114	36 11 4	29	Boat	114	36 11 4
30	Boat	51	5 13	30	Boat	51	5 13
31	Boat	1	3 93	31	Boat	1	3 93
32	Boat	101		32	Boat	101	
33	Boat	116 3	153 3 25	33	Boat	116 3	153 3 25
34	Boat	116	10 9 4	34	Boat	116	10 9 4
35	Boat	1	13 6 4	35	Boat	1	13 6 4
36	Boat	58	15 9 3	36	Boat	58	15 9 3
37	Boat	120	40 9 10	37	Boat	120	40 9 10
38	Boat	61	15 6 3 4	38	Boat	61	15 6 3 4
39	Boat	1	9 90	39	Boat	1	9 90
40	Boat	124	42 4 15	40	Boat	124	42 4 15
41	Boat	1	33 47	41	Boat	1	33 47
42	Boat	62	2 50	42	Boat	62	2 50
43	Boat	1	35 4 1	43	Boat	1	35 4 1
44	Boat	64	13 6 4	44	Boat	64	13 6 4
45	Boat	126	35 4 4	45	Boat	126	35 4 4
46	Boat	64	11 6 4	46	Boat	64	11 6 4
47	Boat	1	62	47	Boat	1	62
48	Boat	1	29 6	48	Boat	1	29 6
49	Boat	65	10 6 5	49	Boat	65	10 6 5
50	Boat	1	24 10	50	Boat	1	24 10
51	Boat	66	13 6 2 5	51	Boat	66	13 6 2 5
52	Boat	67	2 59 0	52	Boat	67	2 59 0
53	Boat	68	7 00	53	Boat	68	7 00
54	Boat	1	10 60	54	Boat	1	10 60
55	Boat	1	2 66	55	Boat	1	2 66
56	Boat	1	1 96	56	Boat	1	1 96
57	Boat	69	60	57	Boat	69	60
58	Boat	125	49 0 0 5	58	Boat	125	49 0 0 5
59	Boat	129	29 0 7	59	Boat	129	29 0 7
60	Boat	70	7 92	60	Boat	70	7 92
61	Boat	71	1 90	61	Boat	71	1 90
62	Boat	129	32 3 40	62	Boat	129	32 3 40
63	Boat	72	11 00	63	Boat	72	11 00
64	Boat	73	10 57 1 53	64	Boat	73	10 57 1 53
65	Boat	132	2 53 92	65	Boat	132	2 53 92
66	Boat	133	43 5 4	66	Boat	133	43 5 4
67	Boat	134	30 9 2 8	67	Boat	134	30 9 2 8
68	Boat	75	2 00	68	Boat	75	2 00
69	Boat	111	10 97	69	Boat	111	10 97

## Yards &amp; Railways

1902	26	Boat	255 111 10 97	1903	26	Boat	255 111 10 97
27	Boat	135	7 62	27	Boat	135	7 62
28	Boat	76	11 10 3 58	28	Boat	76	11 10 3 58
29	Boat	135	43 3 62 1	29	Boat	135	43 3 62 1
30	Boat	139	19 2 1	30	Boat	139	19 2 1
31	Boat	77	4 00	31	Boat	77	4 00
32	Boat	78	25 15	32	Boat	78	25 15
33	Boat	79	25 3 4	33	Boat	79	25 3 4
34	Boat	141	27 1 1 4	34	Boat	141	27 1 1 4
35	Boat	4	6 00	35	Boat	4	6 00
36	Boat	145	11 5 3 1 3	36	Boat	145	11 5 3 1 3
37	Boat	145	13 17	37	Boat	145	13 17
38	Boat	44	11 50	38	Boat	44	11 50
39	Boat	45	60	39	Boat	45	60
40	Boat	46	49 5	40	Boat	46	49 5
41	Boat	47	1 54	41	Boat	47	1 54
42	Boat	48	49 5	42	Boat	48	49 5
43	Boat	147	15 9 02	43	Boat	147	15 9 02
44	Boat	17	11 5 4 1 1	44	Boat	17	11 5 4 1 1
45	Boat	149	17 2 4 1	45	Boat	149	17 2 4 1
46	Boat	150	99 47 1	46	Boat	150	99 47 1
47	Boat	151	21 1 35 1	47	Boat	151	21 1 35 1
48	Boat	152	7 33	48	Boat	152	7 33
49	Boat	90	2 9 4 1	49	Boat	90	2 9 4 1
50	Boat	1	7 00	50	Boat	1	7 00
51	Boat	156	200 7 2 1	51	Boat	156	200 7 2 1
52	Boat	93	12 0	52	Boat	93	12 0
53	Boat	113	4 2 7 0	53	Boat	113	4 2 7 0



## Equipment &amp; Maintenance

1950	12-3	Amesford	052773.59	1950	12-3	Amesford	154	510
Car		Car	1151	1950	12-3	Amesford	204	2.65
		Car	16.25	1950	12-3	Amesford	261	3149.50
			1171					
			53.30					
			12.30					
			70					
			1191					
			4.77					
			442					
			7299					
			1514					
			2.65					
			140					
			1514					
			35.00					
		Amesford	251					
		Amesford	1594.5					
		Amesford	1540.54					
		Car	1551					
			4.33					
			1571					
			29.22					
			2287.60					
			1571					
			3.35					
			25					
			1011					
			125.00					
			64.20					
			139					
			1134					
			65					
			1051					
			16.03					
		Amesford	251					
		Car	432.47					
			1571					
			140					
		Amesford	291					
		Amesford	351.56					
		Car	1171					
			44.66					
			1091					
			610					
		Amesford	291					
		Car	324.61					
			1091					
			21.54					
		Amesford	291					
		Amesford	336.77					
		Car	1091					
			409.44					
			1791					
			62.04					
			22.82					
			40.00					
			1071					
			1471					
			1151					
			271.61					
		Amesford	531					
		Car	451.94					
			1051					
			21.54					
			1571					
			127.4					
		Amesford	191					
		Car	244.7					
			351					
			577.56					
		Car	191					
			519					
			3149.71					

3149.71

## Equipment &amp; Maintenance

1951	7-3	Barrow	200	3149.50	1951	7-3	Barrow	211	35346.30
Car		Car	1171	4.00	Car		Car	1171	4.00
			191	15.61				191	15.61
			391	325.91				391	325.91
			1971	2.50				1971	2.50
			1991	3.06				1991	3.06
			591	221.71				591	221.71
			2051	1.07				2051	1.07
			2051	17.02				2051	17.02
			2071	1.59				2071	1.59
			2071	2.57				2071	2.57
			2091	14.00				2091	14.00
			401	340.30				401	340.30
			2091	7.50				2091	7.50
			411	169.13				411	169.13
			441	28.44				441	28.44
			221	165.59				221	165.59
			2251	13.05				2251	13.05
			441	127.02				441	127.02
			451	32.22				451	32.22
			1291	2.43				1291	2.43
			1291	10.00				1291	10.00
			1120					1120	
			1511	7.5				1511	7.5
			110					110	
			451	339.73				451	339.73
			1511	23.16				1511	23.16
			1511	15.00				1511	15.00
			40					40	
			2351	33.00				2351	33.00
			135					135	
			2371	7.25				2371	7.25
			1511	2.35				1511	2.35
			2491	2.16				2491	2.16
			461	542.34				461	542.34
			171	250.44				171	250.44
			141	15.25				141	15.25
			151	3.20				151	3.20
			171	260.50				171	260.50
			2051	2.75				2051	2.75
			451	140				451	140
			1275					1275	
			640					640	
			171	75				171	75
			30346.30					30346.30	

30346.30

## Equipment &amp; Maintenance

1901 Apr	29	3	Ang feed	261 553 46 30	1901 May	7	of the 2000 lb	454	12 00
	30		carb	2471 27 00	May	9	Basam	263	39 124 22
				2191 12 50					
				4 67					
				12 2 50					
				90					
May				253 155 13 50					
				15 00					
	9		By (see)	45 355 74					
	11		carb	255 7 41					
	11		Thurthorn	49 242 50					
			carb	271 7 50					
	7			259 36					
				4 55					
	24		By (see)	45 375 59					
	27		carb	261 9 40					
June	5			265 25					
	7			195					
	7		By (see)	50 40 114					
	12		Thurthorn	51 133 21					
	17		carb	267 10 65					
	19			271 13					
	20			127					
	24		By (see)	51 343 24					
	26		carb	272 17 67					
				475 57					
	27			275					
July	1			277 51 50					
	6		By (see)	52 244 02					
	9		Thurthorn	53 259 69					
	10		carb	277 12					
				277 350 00					
	11			5 55					
	24		By (see)	54 239 46					
	31		carb	283 15 61 50					
Aug			By (see)	54 314 79					
	1		Thurthorn	1 207 17					
	2		carb	247 30					
				7 65					
				2 64					
				4 82					
	7			249 75					
	29			4 50					
	9			293 570					
				39 136 22					

## Equipment &amp; Maintenance

1901 Aug	9	3	Basam	22 39 124 22	1901 Sep	14	By Ang feed	214 419 62 09
	12		carb	255 6 50				
	16			349 4				
	16			271 4 57				
	21			6 15				
	22			249 29 17 5 22				
	23		By (see)	57 336 18				
	24		carb	501 10 50				
	25			503 17 76 38				
				305 130				
				1147				
	30			207 2 40				
Chl	6			269 29 56 26				
	7		By (see)	524 585 07				
	10		Thurthorn	59 144 04				
	12		carb	511 101 01				
				50				
	20			513 130				
	16		By (see)	59 246 97				
	26		carb	515 1056				
				122				
				3 61				
				517 200				
				267 19				
				7 220				
				57 263				
				40 11 55				
Oct	3			32 40 17 40				
				11 64				
				220				
	10		Thurthorn	624 70 56				
	12		By (see)	61 294 13				
	21		carb	525 25				
				527 11 50				
	23		By (see)	63 299 69				
	29		carb	527 223				
				529 17 65				
Nov	1			531 45 57 65				
	6			533 7 20				
	7			535 10 65				
	11		By (see)	65 323 63				
	12		Thurthorn	66 97 23				
	14		carb	527 223				
				527 392				
				419 209				

## Equipment &amp; Maintenance

1901	14	3	Amg formed	26341902	1902	17	3	Amg formed	26545905
15			bad	344	4043				
22				343	990				
23			Amg (bad)	69	31315				
27			bad	343	540				
				9	24550				
				345	1118799				
28	4			349	3520				
					297				
5				351	243				
9			Amg (bad)	70	32754				
11			Amg (bad)	714	7194				
			bad	353	50				
					355				
13				355	115				
21			Amg (bad)	714	36756				
23			bad	357	64				
1902					2629				
5				361	546				
				363	2315				
					5049				
					267				
6				365	990				
1			28000 lb	73	1200				
8			bad	365	2777				
10			Amg (bad)	74	45424				
14			bad	369	4324				
					447				
15			Amg (bad)	76	24264				
22			bad	371	1980				
				375	364				
23			Amg (bad)	77	36901				
24			bad	375	765				
29					49				
				377	478575				
					575				
3					1500				
				379	1016				
7					215				
				341	1320				
8			Amg (bad)	74	46046				
12			Amg (bad)	79	21796				
15			bad	341	57				
24			Amg (bad)	71	42953				
27			bad	343	57855				
					4596566				

4596566

## Equipment &amp; Maintenance

1902	27	3	Amg formed	26445905	1902	31	3	Amg (bad)	4705962
3			bad	355	76				
7				347	1500				
					130				
					950				
1			Amg (bad)	74	39250				
12			Amg (bad)	72	12306				
15			bad	347	97				
24			Amg (bad)	349	792				
27			bad	349	49333				
				349	500				
					625				
29			Amg (bad)	74	2700				
31			bad	395	235				
					4705962				
April	1	3	Amg (bad)	4705962	April	21	3	Amg (bad)	26445905
2			bad	1	26691				
				2	7921				
				2	4471				
				2	2351				
7				3	10041				
				4	4741				
					2101				
					150001				
9				5	16401				
10			Amg (bad)	74	40454				
			bad	6	9511				
					1151				
					6001				
					2901				
				7	4051				
					6601				
					15351				
12					14601				
					9091				
				9	14501				
			Amg (bad)	74	19771				
17			bad	10	12041				
					120001				
					5001				
21					59341				
				11	3441				
					6001				
				12	601				
					4646690				

4646690

## Equipment &amp; Maintenance

Apr 21	3	Amey bed	255.44	10.99	70	175
24		bed	12.	4.66	25	257.570
	12.	10.44				
		9.5				
25		bag shoe	27.	412.41		
26		bed	13.	2.30		
		off brought	44.	16.49		
27		bed	12.	32.		
May 7			15.	99.		
			16.	4.00		
9		bag shoe	90.	431.34		
14		Shoethorn		9.59		
7		bed	15.	51.22		
21			16.	24.		
			17.	1.60		
				30		
				32.49		
			18.	2.46		
22				2.48		
				4.00		
			19.	76		
24				26.67		
27		bag shoe	91.	499.35		
29		bed	20.	25		
				50.00		
June 7				9.69		
			21.	47.44		
				4.41		
10		bag shoe	94.	472.44		
12		Shoethorn	95.	121.76		
13		bed	22.	4.00		
20		off from 8th	95.	6.57		
25		bed	22.	1.05		
		bag shoe	96.	574.22		
27		bed	23.	1.20		
				90.02		
			24.	7.30		
				49		
				1.92		
				75		
				5.00		
				22.44		
				3.20		
July 1		bag shoe	97.	525.10		
				57.97.45		

57.97.45

## Equipment &amp; Maintenance

July 1	3	Bureau	22	589.570	90	267.545.69
10		Shoethorn	94.	77.17		
		bed	26.	58.00		
				159.21		
				4.07		
15			27.	12.06		
22			28.	29.4		
23				50		
			29.	10.6		
		bag shoe	99.	349.03		
25		bed	30.	16.00		
				6.75		
29			31.	2.00		
				4.24		
				50.00		
				11.79		
			32.	74.63		
Aug 9		bag shoe	101.	537.75		
11		Shoethorn	102.	3.02		
		bed	34.	6.04		
			35.	5.10		
				2.53		
25		bag shoe	103.	371.57		
26		bed	35.	157.62		
27			36.	16.31		
				11.93		
			38.	22.50		
				4.05		
Sept 1		bag shoe	105.	426.73		
		bed	37.	7.92		
				2.95		
10		Shoethorn	106.	39.45		
16		bed	39.	77.16		
19				62.00		
			40.	1.35		
				5.1		
			41.	10.54		
				5.61		
				5.66		
				1.23		
				7.03		
20		bag shoe	107.	370.09		
Oct 2		bed	42.	14.50		
				14.50		
4				2.92		
				395.67.99		

395.67.99



## Inves

1900	16	2	land	155	110	40	1901	31	By Balance	141410
Apr	18	.	.	177	342	30				
May	19	.	.	305	100					
Jun	14	.	.	355	107	20				
	7	.	.		51	00				
					55	20				
					141	410				141410
1901	1	2	Balance		141	410	1901	30	By Balance	347966
Apr	4	.	land	12	100					
May	12	.	.	56	199	50				
1901					37	66				
Apr	23	.	.	20	5	37				
					347	966				347966

## Equipment &amp; Maintenance

1901	25	2	Balance	269	649	21	1901	30	By Balance	152	679	15	2
Apr		.	land	10	2	40							
		.	By Bal	141	247	00							
	24	.	land	41	6	00							
	25	.	.		63	75							
May	1	.	By Bal	143	20	49							
	13	.	land	28	450	00							
		.	.	43	6	37							
	14	.	land	145	66	97							
		.	land	14	2	05							
		.	.		2	40							
		.	.		10	41							
		.	.		133	20							
		.	.		96	67							
		.	.	15	1	15							
		.	.		5	96							
	27	.	By Bal	147	100	24							
June	28	.	land	67	59	39							
	5	.	.		5	25							
	6	.	W. B. B. B.	149	16	73							
	7	.	W. B. B. B.	150	70	20							
	9	.	By Bal	151	20	34							
		.	W. B. B. B.	152	21	67							
	10	.	land	17	7	60							
		.	.	14	6	74							
		.	.		12	1							
		.	.	19	5	49							
		.	.		17	96							
		.	.		40								
	11	.	land	152	15	59							
	14	.	W. B. B. B.	153	146	20							
	19	.	land	90									
		.	.		93								
		.	.	91	2	37							
		.	.	92	19	52							
		.	.	93	52	27							
	24	.	By Bal	156	20	42							
					67	97							
					152	679							

## Price Machinery

1900	Qty			1900	Qty			1900	Qty		
	20	2	Amg fcs	96	38370	15			20	2	50
			back	153R	735				25	52116	75
					735						
			Smithson	257R	53674						
	23		Qty (back)		1485	10					
	24		back	155R	73460						
					59675						
	29			17R	175						
					2064						
					1971						
					5500						
					4745						
					6002						
					190005						
	30				130						
				159R	65						
					1125						
Nov	5			161R	5423	05					
					524						
					21500						
					7076						
					25						
				113R	9205						
	6				545						
	7			105R	525						
					219						
					2547						
					3251						
					9793						
			Qty (back)	26R	1544	64					
			back	167R	11276						
				167R	4513						
					416						
	14		Smithson	27R	50077						
	17		back	167R	58						
				109R	13172						
					12425						
			Qty (back)	27R	41604						
			back	109R	12742						
					4375						
				171R	50574						
					441						
				174R	575						
				175R	27732						
					52499	55					
Dec	1										

## Price Machinery

1900	Qty			1900	Qty			1900	Qty		
	1		Qty (back)	174	5214	15			5		Qty back
			back	175R	445				12		Qty (back)
					16955				19		Baronne
					6340						
					34494						
	6		Qty (back)	291R	92055						
	10		Smithson		63497						
			back	175R	2445						
					1135						
				177R	7042						
					259						
					10155						
					59876						
	15			179R	5375						
					5000						
	18			141R	701						
					6571436						
					24400	02					
	21			143R	58220						
					1074						
					23160						
	22		Qty (back)	53R	90143						
	24		back	103R	509						
	25				1940						
	29			105R	6746						
	31			179R	21023						
1901	7			179R	11244						
					1772						
					101450						
	9				3162						
					43714						
				191R	445						
	10			192R	652						
				193R	216						
					60						
					4250						
					1599						
	11			195R	65144						
	12		Qty (back)	151R	60446						
	16		back	195R	250						
	17			197R	20744						
					759						
	18				2290						
	19		Smithson	151R	14000						
					641572						

## Price Machinery

1901	19	2	Bureau	275 45 97	32	275	15	by day done	45	on 13 25
1901	21		day done	37 8 99	41 6	275	25	Bureau	27	15 91 11 41
	23		band	197 10	50 0					
				197 10	15					
				27 16						
	24		band	39 8 16	39					
				201 6 15	7 12					
	25			201 6 15	4 99					
	26			10	6 94					
	28			203 10	23 51					
				10	13 4 14					
	31			10	10 95					
1901	2			107 10	63 00					
	6			10	40 1 69					
				10	10 1 62					
				10	3 52					
				10	2 4					
				209 10	25 00					
				10	27 94					
				10	21 4 21					
				10	8 407					
				10	3 31					
				10	12					
	8		day done	40 10	12 25 14					
			band	109 10	13 25					
				211 10	12 30					
	12		band done	41 8	97 5 45					
	14		band	211 10	6 10 1					
				10	12 640					
				10 10	22 1 34					
	15			10	12 66					
				10	2 55					
				10	13 23					
				10	50 39					
				215 10	11 5 63					
				10	17 09					
				10	2 91					
				10	1 95					
				10	3 52					
	25		day done	44 10	13 20 95					
	26		band	215 10	20 1 47					
				27 10	42 7 10					
				10	6 97					
				10	5 1 27					
				75 2 5 69						

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## Price Machinery

1901	26	2	Bureau	276 75 91	11	276	15	by day done	44 10	1 67
1901	27		band	27 10	52	276	25		45 10	1 67
				27 10	45 50	276	35	day done	45 10	1 67
				10	5 13 59					
1901	28			22 10	57 64					
				10	57 93					
				10	95 09					
				10	2 62					
				10	3 60					
	7			22 10	17 49					
				10	5 50					
				10	2 50 63					
	8		band done	44 10	32 0 59					
			band done	45 10	103 7 72					
	9		band	22 10	2 85					
				10	67 11					
				10	14 09					
				10	47 6					
	15			10	19 90					
	16			22 10	27 1 83					
				10	3 32					
	21			10	4 45					
				22 10	36 52					
				10	11 23 13					
				22 10	3 49					
				10	73 2 47					
				10	106 7 2					
				10	30					
				10	33 26					
	22			22 10	189 2 1					
	23		band done	45 10	17 67 32					
	27		band	22 10	17 1 63					
				10	42 65					
				22 10	151 43					
				10	303 60					
	29			10	25 00					
				10	44 03					
	30			10	42 3 09					
				10	27 3 1					
				10	4 31					
				10	44 13					
				10	17 67 1 4					
1901	2			22 10	81 53					
				10	2 1 1					
				10	33 00					
	5			10	44 27					
				10	14 1 36					

14012509





## Mice Machinery

June 11	2y Balam	279 10600	12	2y Balam	52.2	912
	Barb	279 327	6	2y Barb	52.2	425
		279 266	11	Balam	279 112458.71	
		279 20				
		279 203				
		279 1567				
		279 1367				
		279 4458				
		279 2032				
		279 37167				
		279 2075				
		279 1496				
		279 72				
		279 21209 45				
		279 3949				
24	2y Barb	51 2223	12			
25	2y Barb	279 4634				
		279 2127				
		279 326 72				
		279 10345				
		279 3671				
		279 2733				
		279 4460				
July 1		279 2733				
		279 2961				
		279 3319				
		279 5712				
		279 98				
6	2y Barb	52 2127 60				
9	2y Barb	53 2127 05				
10	Barb	279 2461				
		279 15733				
		279 4926				
		279 2500				
		279 452				
		279 23610				
		279 3863				
		279 744				
		279 5190				
		279 6995				
		279 67463				
		279 500				
		279 16570				
		279 29351				
		116470.06				
		116470.06				

## Mice Machinery

July 11	2y Balam	279 1164571	24	2y Barb	53 2 345
	Barb	279 3120	25	Barb	279 29
		279 14799	Aug 9	Balam	279 276
		279 2633			279 132503 60
		279 36665			
		279 2053			
		279 4320			
		279 520			
		279 1172			
		279 3743 53			
		279 11699			
13	2y Barb	52 21975 50			
21	Barb	279 3090			
		279 2059			
		279 2460			
Aug 1	2y Barb	54 2151 65			
	Barb	279 327 10			
		279 2764			
		279 4250			
		279 196			
		279 137 50			
		279 453			
		279 3023			
		279 10454			
		279 117 437			
		279 20073			
		279 1665			
		279 6046			
		279 2127			
		279 61105			
		279 9619			
		279 17560			
		279 15226			
		279 2127 41			
		279 2126			
		279 1119			
		279 4246			
		279 32151			
		279 245			
		279 17925			
		279 15471			
		279 15950			
		279 36203			
		279 3053			
		279 2702			
		132507 54			



## Steel Machinery

Qty	St. 2, Barren	2015400.91	Qty	St. 50 of Heavy Barren	01	112.59
1	Bar	221. 195.88	04	12. Bay Bar	625	160.99
		7.50	St. 1. Barren		204766.69	39
		96.57				
		83.50				
		39.10				
		60.00				
		0.54466				
		0.55164				
		8.82				
		22696.77				
5		323. 29.26				
		21.12				
10	Barren	62. 107.45				
15	Bar	323. 56.46				
		51.93				
12	Bay Bar	63. 175.33				
21	Bar	323. 49.32				
		40.00				
		10.10				
		17.32				
		48.23				
		15.66				
		33.85				
		329. 123.87				
		66.50				
63		63. 175.34				
29		329. 5.21				
		167.86				
		106.71				
		135.35				
		329. 39.23				
		8103.43				
		6.70				
		10355.53				
		63.63				
		0.56544				
		0.44612				
		0.459.18				
		190.06				
		44.61				
		210.00				
		01144.44				
		50.12				
		59.50				
		16921.47				

16921.47

## Steel Machinery

1	Bay Barren	204766.69	112.59	01	112.59
1	Land	33.11 60.95	11	Bay Barren	625.16 470.47
		53.28 572.22	12	Barren	294.12 117.15
6		52.40			
		35.40			
		40.45			
		56.93			
7		2.30			
		335. 23.49			
		13.75			
		163.44			
		36.57			
		72.30			
		2565.27			
1		327. 20.74			
		25.77			
11	Bay Barren	63. 23.05			
12	Barren	63. 23.05			
14	Land	337. 7.67			
		109.45			
		19.95			
		21.10			
		16.77			
		219.44			
		329. 70.04			
		195.44			
		29.20			
		2391.00			
		225			
		4000			
		340			
		105.54			
		2.73			
		0.445.31			
		67.62			
		3412 549.00			
15		54.44			
		50.15			
		10.50			
		26.00			
		4449.14			
10		26737.10			
22		59.40			
		07.57			
		14020.56			

14020.56



Plans

[illegible]

## Plans

[illegible]

## Plans

1904	May	31	2, Balance	279,531.48	30	1904	May	31	2, Balance	53,863.66
			Load	595,179.53						53,863.66
				53,863.66						53,863.66
April	1	2, Balance		53,863.66		May	1	2, Balance	79,259.00	
	2	Load		1,177.49		June	30	Balance	100,542.03	44.00
	3			2, 183.33						
	4			2, 207.92						
	10			6, 10.50						
	11			6, 3.60						
	17			9, 1.63						
	21			11, 5.40						
	22			12, 6.51						
	24			12, 145.16						
	26			13, 26.51						
				14, 27.51						
May	22			14, 541.16	30					
				19, 22.05						
June	13			22, 511.75	30					
July	10			26, 101.47	30					
Aug	5			26, 10.50	30					
Sept	5			33, 511.55	30					
				30, 15.60						
				16.11						
				77.4						
				39, 69.5						
				50.5						
1904	19			40, 3.50						
Feb	11			67, 512.15	30					
May	19			74, 12.40	30					
June	6			74, 12.40	30					
				106, 512.15	30					
				106, 512.15	30					
				54,229.35						

## Quamie

1903 May	1	3	Barnum	101	11339	22	1903 June	5	by	bank	47	453	92
	1		Land	622	190		24		by	bank	155	600	
			by	145	414	42	30		Bank	110	1197	50	
	13		Land	131	193	92							
	14		Struthers	145		32	41						
			Land	155		3	25						
						19	6						
	16		Chapman	145		8	77						
	27		Land	16		1	94						
	28		by	147		9	22	62					
June	2		Land	11	30	4	3	3					
	6					1	100						
	6		W. M. W. W.	149		27	61						
	8		W. M. W. W.	150		23	64	53					
	9		by	151		93	75						
			W. M. W. W.	152		64	73						
	10		Land	14		29	24						
	11			69		3	15						
			Struthers	152		39	14						
	19		Land	90		1	30						
						92	12	02					
							2	45					
	24		by	150		62	04	22					
	25		Land	93		5							
	26			94		4	15						
				120		162	01						
				120		162	01						
						</							



Quarries

1992	22	3	Barren	59	1529939	1992	6	Boy	boob	174	1656
1993	22		boob	714	8425	1993	22	Boy	boob	324	140
	30			173	735500	1994	5			404	1536
1994	6	Boy	boob	294	160323	1994	5			414	2106
	10	Swathorn			71314	1995	21	Boat		495	73072
	15	boob		179	6204						
					7500						
	15			104	1471						
	20				4022						
	21			103	30750						
					17161						
	22	Boy	boob	33	177944						
	24	boob		184	2941						
	25				2760						
1995	31			185	15000						
1996	7			184	23160						
	9				11400						
				191	2047						
					175						
	10			40	4046						
	12			33	150856						
	15			197	3535						
	19	Swathorn		34	69790						
	21	Boy	boob	39	144013						
	23	boob		197	1260						
				194	53						
	26			204	53						
					522						
	30				6156						
				203	900						
	31			205	5100						
	6			209	42756						
1997	6	Boy	boob	40	157244						
		boob		209	3200						
	12	Swathorn		41	71775						
	14	boob		211	9244						
	25	Boy	boob	44	120034						
	26	boob		217	12701						
	5			224	15312						
	6				5745						
				220	4319						
	7	Swathorn		44	61294						
		Boy	boob	45	123472						
	21	boob		227	1043						
					240477						
					700447						

Quarries

[illegible]





## Quarries

1902	2	2	Bauman	279	103,572.74	1902	6	6	Quarries	116	6.00
1902	4		baul	43	90	1902	22	22	baul	63	37,675.00
	7				51.62	1902	24	24	Bauman	101	107,653.52
				44	299						
	1		baul	109	551.51						
	11		baul	110	19.16						
	14		baul	46	76.45						
					2190						
	21				675						
				47	46.06						
					17.00						
	12		baul	111	702.96						
1902	24		baul	44	64.16						
	6			50	139.60						
					2520						
	1		baul	112	764.25						
	17		baul	113	274.77						
	10		baul	50	76.71						
					53.46						
	22		baul	114	719.45						
	24		baul	51	270						
					130						
	29				699.4						
1902	5			52	23.40						
	6			55	220						
	1		baul	115	505.13						
	10		baul	116	45.50						
					12.07						
	12		baul	55	12.00						
				56	51.42						
	15			57	210.00						
	22			59	2.04						
	23		baul	120	619.07						
	30		baul	60	76.65						
1902	1			61	78.54						
					25.25						
	1				17.42						
	12		baul	124	524.19						
	14		baul		53.04						
	15		baul	125	431.27						
				126	500						
	21				1270						
	24		baul	126	976.21						
	24		baul	127	14157						
					11559.52						

11559.52

## Quarries

1903	24	2	Bauman	370	107,653.52	1903	30	30	baul	142	367.5
1903	2		baul	64	32.67	1903	30	30	baul	142	113,374.25
1903	7				3.00						
	11				71.67						
				67	44.50						
					59						
				64	22.17						
					220.11						
	16			69	1.00						
					570						
	11		baul	127	524.24						
	13		baul	129	644.4						
	21		baul	69	34.11						
	24			70	21.75						
	25				6.25						
				71	13.00						
				72	29.71						
	24		baul	129	906.74						
1903	14		baul	73	56.32						
	13				4.75						
	16		baul	132	752.70						
	17		baul	75	52.00						
					10.75						
				74	137.15						
					54.20						
	20		baul	132	966.52						
			baul	133	64.40						
	23		baul	133	370.45						
	21		baul	74	200.00						
	26			75	4.00						
	27				72.42						
	27		32,00	135	792						
1903	9		baul	76	1139.00						
	11		baul	134	242.40						
	13		baul	139	192.71						
	14		baul	77	3.50						
	23			78	54.01						
					3.50						
					51.44						
				79	44.01						
			baul	141	2470.1						
	24		baul	80	600.1						
					10.44						
					113447.01						

113447.01

## Misc Administrators

1900	Dec	2	By Balance	6547	14501	1900	Dec	12	By Pay due	32	3076
			bank	104	794					35	1600
				104	346					39	1500
		22	By due	38	63620					40	7725
		25	By bank	102	77969					303	3207131
		29		105	50000						
		31			21667						
		31			3110						
1901	Jan	7		107	1400						
				107	11462						
		9			713						
		9		191	2420						
		10		192	220						
					1033						
				195	2150						
		12	By due	38	60353						
		17	bank	195	1100						
				197	145						
		14			15416						
			bank interest	34	14634						
		19	bank		1444						
		21	By due	39	57695						
		23	bank	197	2577						
				199	35						
		24		199	2471						
		25		201	290						
		26			203						
					25						
		28		203	25						
		31			5336						
				205	4625						
					50000						
					22503						
		7		207	376						
		6			346						
					200						
				209	775						
					100						
		1	By due	110	63670						
			bank	211	14649						
		12	bank	41	2922						
		14	bank	211	400						
					275						
					3720						
				32100	32						

32100 32

## Misc Administrators

1901	Jan	14	By Balance	3207131	1901	Jan	25	By Pay due	42	4300
			bank	234	1260				44	2225
					11512				45	3700
		15			460				304	3600023
					8962					
		19		215	2695					
		20	By due	44	2623					
		26	bank	215	2803					
				217	410					
					210					
		28			945					
				219	700					
					75					
					624					
					244					
March		1		221	50000					
					20000					
		5			10000					
				223	11566					
		6	bank	44	5764					
			By due	45	55101					
		9	bank	225	431					
					544					
					112					
					120					
		15			12					
		16			176					
					2490					
					2670					
				227	115					
		21			1260					
					176					
				229	1264					
		23	By due	45	56127					
		27	bank	231	35018					
					294					
		30			350					
					130					
					16200					
				235	1247					
					269					
					50000					
					21067					
				237	35018					
April		2			364760					

364760



## Misc Administration

1901	Aug	7	By Bureau	304 499.33	1901	Aug	28	By Aug chae	57	50.25
		1	Land	291	4.22	7			57	14.91
		"		"	152.23	"			59	6.95
		"		293	3.06	24	3	Bureau	57	49.15
		"		"	5.44					
		9		"	17.35					
		12		"	49.5					
		"		"	7.12					
		14		"	2.00					
		"		"	2.11					
		"		"	297					
		"		"	25					
		"		"	33.23					
		21		"	92.14					
		"		"	299					
		"		"	1.57					
		22		"	301					
		23	By chae	57	546.46					
		24	Land	501	14.58					
		25		303	15.90					
		"		"	3.40					
		"		"	6.25					
		"		"	16.00					
		"		"	305					
		"		"	42.09					
		29		"	2.25					
		"		"	500.00					
		"		"	225.00					
		31		"	507					
		31		"	509					
		7	By chae	504	514.09					
		10	Land Bureau	57	10.16					
		12	Land	509	6.42					
		"		511	2.5					
		20		513	113.22					
		21	By chae	57	476.19					
		24	Land	513	1.04					
		"		"	4.20					
		"		"	10.32					
		26		"	3.00					
		"		"	93.65					
		"		"	167.5					
		"		"	2.00					
		"		"	510					
		30		"	521					
		"		"	120					
		"		"	201.33					
		"		"	4777.76					
		"		"	4977.46					

## Misc Administration

1901	Aug	3	27	Bureau	504 491.05	1901	Aug	12	By Aug chae	62	15.44
				Land	221	500.00				64	6.45
						6.13					1.44
						496.34					2.50
						25					13.51
						49.04					2.44
						5.44					16.45
						55					10.64
						193.39					547.76
						63					57.95
						107					1.00
						15.51					50
						50					5.26
						581					20
						72.75					7.25
						333					500.00
						225.00					8000
						91.67					15.40
						65					19.00
						61					540.44
						497					216.66
						339					500.00
						8000					13.00
						441					3.00
						440					9.00
						69					3.29
						445					4444
						507					243.41
						497					505.34
						497					2.55
						111					3.95
						3.00					1.00
						16.00					2.64
						9.00					5.10
						3.29					5477.76
						4444					5477.76
						551					505.34
						70					2.55
						71					3.95
						550					1.00
						13					2.64
						550					5.10
						54					5477.76







## Shipping Department,

[illegible]

## Masonry

1891	26	2	Bauman	194	59	691	91	1891	1	By	By	454	5	55
Feb			back	2174	173	55		Mar	25			457	3	74
May	5			2211	58	29	Apr	1				461	2	58
	6				62	60		22				474	2	75
	7		Stone thrown	2231	96	73	May	9				484	3	85
	8		By	441	120	24				Bauman		510	70	27
	9		back	2257	1700	01								
					7	40								
					44	34								
	15				49	14								
	16			227	29	400								
					20	57								
	21				12	58								
				2291	41	11								
					35	59								
	22			231	29	400								
	24		By	451	165	52								
	27		back	211	113	12								
	30			2331	53	31								
					17	4								
				245	20	00								
April	1			237	31	25								
					22	65								
	6			239	34	20								
					21	45								
	8		By	461	154	73								
	10		Stone thrown		150	44								
	12		back	239	67	75								
					17	40								
				241	15	00								
					14	00								
					16	00								
	7				19	65								
	19				19	65								
	22		By	47	169	00								
	26		back	243	15	06								
					43	76								
					22	47								
				245	120	07								
					102	50								
	29				52	50								
	30			249	59	40								
					13	55								
May	2			253	67	20	60							
	4				64	75								
					70	45	39							

## Masonry

1891	9	2	Bauman	510	70	27	20	1891	24	By	By	449	1	25
May			By	484	2102	34	June	6		Stone thrown		50	23	73
	10		back	255	125	57		8		By		1	1	00
					43	20		24				51	4	37
					299	10	July	6				52	23	75
					6	53				back		26	15	44
	11		Stone thrown	494	196	35		24		By		53	2	45
			back	257	20	00	Aug	1				52	15	50
	17			259	14	45	3			Bauman		120	15	22
					12	90								
					117	00								
	24		By	494	19	43	02							
			back	261	37	00								
					49	19								
					10	12								
	27				23	75								
	30			263	29	40								
June	5			265	21	307								
					10	25								
	1		By	504	143	30	52							
	12		Stone thrown	514	16	54								
	17		back	269	31	10								
	19			271	34	73								
	20				78	00								
	24		By	514	70	430								
	26		back	272	29	400								
				495	163	25								
	27				10	00								
July	1			277	51	40	06							
					29	400								
	6		By	521	133	0	49							
	9		Stone thrown	534	102	69								
	10		back	277	74	91								
				279	29	400								
	11				20	60								
	12			281	13	40								
					77	11								
	20			283	50	400								
	24		By	534	50	34								
	31		back	281	33	20	00							
Aug	1		By	544	64	12								
			Stone thrown		1107	3	27							
	2		back	287	177	50								
	3			289	106	57								
					55	42	64							

## Masonry

1901 Aug	5	3	Balanced	59	15622.03	1901 Dec	7	By	By	594	470
	6		band	59.	54.19		16			594	204
	7			59.	75.20		27		band	594	1710
	9			59.	137.34	Aug	25		By	624	2710
	12				2070		12			624	410
	15			59.	26.46	Dec	11			654	535
	21			59.	70.32		12		band	654	2538
	23				22.07					654	9312772
	23		By	59.	52						
	24		band	59.	499.53						
	25			50.	294.00						
	27			50.	54.56						
	30			50.	31.69						
	31			50.	15.67						
Sept	6			50.	154.50						
	7		By	54	505.45						
	10		band	59.	44.37						
	12			59.	127.40						
					1070						
				51.	12.64						
					56.63						
					53.59						
					127.00						
	20			51.	52.5						
	16		By	59.	676.07						
	24		band	51.	124.11						
	26			51.	173.4						
	28				39.29						
	29			51.	45.44						
Oct	8			52.	1066.61						
	10				254.50						
	12		band	62.	20.32						
	21		By	63.	641.22						
	25		band	62.	134.34						
	27			62.	44.00						
	28		By	63.	709.03						
	29		band	62.	52.57						
					195.44						
	1			63.	1136.53						
	6			53.	254.40						
	7				21.40						
	11		By	55.	49.56						
	12		band	65.	1130.10						
	14			66.	549.12						
					93773.96						

95170.63

## Masonry

1901 Dec	12	3	Balanced	52	9312772	1901 Dec	15	By	By	67	6020
	14		band	52.	25.42		16			67	702
	15			54.	303.61	Dec	21			72.	71.54
	22				2970	1901 Jan	11			74.	77.12
	23		By	59	11047.32	1901 Feb	3		band	121	10153.96
	27		band	54.	254.40						
					10153						
					404						
					100.99						
	30			54.	139.10						
					114.45						
Dec	5			55.	19.95						
	9		By	70.	991.52						
			band	54.	254.40						
					46.56						
	11		band	71.	229.50						
			band	53.	52.75						
	13			55.	1.60						
	21		By	71.	794.30						
	22		band	57.	170.49						
					131.54						
				59.	21.41						
1901 Jan	3			56.	34.25						
					27.25						
					2970						
	6			56.	17.42						
	8			55.	139.95						
					24.13						
					254.40						
	10		By	74.	1276.41						
	14		band	59.	14.22						
					99.47						
					74.4						
	15		band	74.	252.46						
	22		band	57.	58.64						
					11.50						
	23		By	77.	1049.66						
	25		band	53.	9.57						
	29			57.	232.63						
Feb	1			57.	1153.84						
	3				64.11						
					51.4						
				32.	19.54						
				59.	1420						
					10163.57						

10163.57

## Masonry

1921	3	By Bureau	221 10157 92	1921	1	By Bureau	105 631 43
Feb	7	Card	579 2376	Mar	2	Card	105 224 07
	11	By Bureau	74 960 10				
	12	Card	791 184 61				
	14	Card	341 77 47				
			15 03				
	24	By Bureau	41 774 13				
	27	Card	343 18 46				
May	3	Card	355 1116 54				
	7	Card	571 101 92				
	11	By Bureau	541 694 95				
	12	Card	521 41 04				
	15	Card	349 15 64				
	24	By Bureau	531 844 77				
	25	Card	441 125 79				
	27	Card	391 33 75				
	28	Card	393 57 19				
			955 631 43				
April	1	By Bureau	105 224 47	June	1	By Bureau	105 631 43
	2	Card	1 30 54		2	Card	105 224 07
			13 46				
	2	Card	6 50				
	3	Card	108 44				
	7	Card	23 40				
			52 14				
	3	Card	30 10				
			156 00				
	4	Card	7 20				
			75				
	9	Card	5 21 03				
	10	By Bureau	161 1296 42				
		Card	7 442 74				
			1 00				
			21 75				
			39 62				
	12	Card	5 50				
			9 146 02				
		Card	16 42 49				
	21	Card	11 5 00				
			60 53				
			12 4 00				
			4 44				
	24	Card	32 44				
	25	By Bureau	7 103 271				
			169 631 43				

## Masonry

1921	25	By Bureau	221 092 09 03	1921	6	By Bureau	221 114 703 59
Mar	26	Card	13 33				
	27	Card	22 54				
			14 76 63				
May	1	Card	15 09 52 63				
	7	Card	37 59				
			152 55				
			16 17 10				
	9	By Bureau	90 632 71				
	10	Card	37 21				
	21	Card	91 102 19				
		Card	7 34 20				
			10 52 00				
	24	Card	19 39 60				
	27	By Bureau	91 702 44				
	29	Card	20 59 59				
			42 59				
June	7	Card	21 11 45				
	10	By Bureau	94 42 56				
	12	Card	95 17 55				
	25	By Bureau	96 54 23				
July	1	Card	112 51 21				
			97 23 26				
	10	Card	94 21 72				
	12	Card	26 52 95				
	23	Card	27 13 50				
		By Bureau	99 14 42				
		Card	30 14 41				
Aug	5	Card	113 47 07				
	9	By Bureau	101 217 33				
	11	Card	102 40				
	23	Card	35 63 70				
	25	By Bureau	103 34 94				
Sept	5	Card	113 62 41				
			100 77 14				
		Card	34 34				
	10	Card	104 12				
	20	By Bureau	107 51 43				
		Card	42 52 41				
Oct	4	By Bureau	109 93 61				
	11	Card	101 6 53				
	22	By Bureau	111 39 02				
			114 26 64				
Nov	2	Card	114 243 94				
	22	Card	57 27 00				
	29	Card	55 57 50				
Dec	6	Card	114 703 59				

## Masonry

1902	6	By Amos & Co	223 114703 39	1903	9	By Amos & Co	155 1773
1902	7	By Amos & Co	116 165 12	1903	9	By Amos & Co	225 119776 92
1902	10	By Amos & Co	110 25				
1902	11	By Amos & Co	10 10 04				
1902	12	By Amos & Co	50 34 55				
1902	23	By Amos & Co	120 17 45 1				
1902	24	By Amos & Co	61 55 25 1				
1902	25	By Amos & Co	74 11				
1902	26	By Amos & Co	3 96 1				
1902	27	By Amos & Co	124 25 26 41				
1902	28	By Amos & Co	2 236				
1902	29	By Amos & Co	63 1 50 1				
1902	30	By Amos & Co	121 50 1				
1902	31	By Amos & Co	24 16 1				
1902	32	By Amos & Co	4 47 1				
1902	33	By Amos & Co	126 49 49 7				
1902	34	By Amos & Co	64 16 53				
1902	35	By Amos & Co	60 16 55 25				
1902	36	By Amos & Co	1 50				
1902	37	By Amos & Co	65 17 00				
1902	38	By Amos & Co	126 47 0 03				
1902	39	By Amos & Co	129 3 20				
1902	40	By Amos & Co	70 59 4				
1902	41	By Amos & Co	71 25 40				
1902	42	By Amos & Co	129 29 5 57				
1902	43	By Amos & Co	126 17 5 55				
1902	44	By Amos & Co	133 25 02				
1902	45	By Amos & Co	135 1 00				
1902	46	By Amos & Co	130 17 64 16				
1902	47	By Amos & Co	139 23 5				
1902	48	By Amos & Co	77 5 00				
1902	49	By Amos & Co	141 73 6 67				
1902	50	By Amos & Co	144 18 00				
1902	51	By Amos & Co	145 12 5 52				
1902	52	By Amos & Co	145 47 2 14				
1902	53	By Amos & Co	62 1 00				
1902	54	By Amos & Co	144 90				
1902	55	By Amos & Co	145 55 3 4				
1902	56	By Amos & Co	25 28 1 19				
1902	57	By Amos & Co	7 92 2				
1902	58	By Amos & Co	7 92 2				
1902	59	By Amos & Co	147 46 5 51				
1902	60	By Amos & Co	147 25 5 54				
1902	61	By Amos & Co	147 7 9 2				
1902	62	By Amos & Co	147 11 6 2				
1902	63	By Amos & Co	157 49 3 01				
1902	64	By Amos & Co	177 79 6 5				

1777965

## Masonry

1903	9	By Amos & Co	119 71 7	1903	24	By Amos & Co	155 4 50 1
1903	11	By Amos & Co	152 17 57	1903	25	By Amos & Co	172 120 2 1
1903	12	By Amos & Co	91 20 55	1903	26	By Amos & Co	172 120 2 1
1903	13	By Amos & Co	156 4 52 07	1903	27	By Amos & Co	172 120 2 1
1903	14	By Amos & Co	172 16 36	1903	28	By Amos & Co	172 120 2 1

172120211



## Head Estate

Apr	1	Barren	329	107764	664	1901	By By due	904	2571
	2	Bar	1	6146	1	27		924	507
	9		5	975	10			984	1151
	10	By due	16	154	1			974	4389
	12	Stuck down	16	33	27			1014	1500
	24	Bar	12	1966	25			1034	707
			13	7000	1			1064	1070
	25	By due	17	3173	20			1074	600
	26	Bar	13	144	1			1094	2273
				1755	1			1124	113
May	7		15	8430		112			70
	9	By due	904	70	12	113			657
	10	Stuck down	1	15	22	114			70
	27	By due	914	90	23	120			1770
June	10		940	2546		33	10762560		
	12	Stuck down	954	14					
	25	By due	964	4461					
July	1		97	10435	01				
	10	Stuck down	984	130					
	22	Bar	244	20					
	24		29	2500					
		By due	994	722					
Aug	9		101	1042	02	20			
	11	Stuck down	1024	464					
	25	By due	1034	140					
	27	Bar	564	450					
Sept	1	By due	1044	244					
		Bar	504	450					
				735					
				560					
	10	Stuck down	1064	76					
Oct	22	By due	111	1042	02	20			
	24	Bar	444	12					
				170					
	25		494	7500					
	27			25					
Nov	1	By due	1124	1042	02	20			
	22		1144	365					
	24	Bar	614	445					
Dec	6		54	1042	02	20			
	2	By due	1124	1042					
	10	Stuck down	1144	712					
				231					
	10	Bar	54	1520					
				1043605					

## Head Estate

1902	24	Barren	100	104554	40	1903	12	By By due	124	350	1
		By due	1204	2452	27	11			124	1500	1
1903	14	Stuck down	1244	253		24			124	1200	1
May	21	Bar	634	50	104	24			141	1200	1
	25		704	1042	02	20			147	1200	1
2d			744	1042	02	20			153	1200	1
May	19			15714		30		Bar 22	120	104750	1
	20	Stuck down	1334	39							
	23	By due	1344	1156							
Apr	23	Bar	600	2620							
May	1		624	1220	13						
	2	By due	1434	342							
	14	Stuck down	1454	14							
	25	Bar	464	1946							
	27	By due	1474	2411							
June	6	Stuck down	1494	1042	02	20					
	8	Bar	474	420							
	9	By due	1514	6414							
	10	Bar	494	410							
	11		904	963							
		Stuck down	1524	2639							
	19	Bar	904	1945							
				300							
			914	2500							
	22		934	1040							
	24	By due	1544	772							
				104750							
				104750							



## Cormorants

1921	16	3	Amey fnd	225	10359	12	1922	7	Amey fnd	225	12677	25
Aug			Land	2271	10							
					225							
	21				2250							
					137							
				2291	1269							
					1594							
	26			2211	4354							
	27			2231	747	35						
	30				594							
					1445							
				2451	207							
					107							
					164							
					275							
Apr	2			2271	3012							
					777							
	6			2291	305							
					3639							
	12				760							
	17			2411	2651							
					3616							
	25			2431	1335							
	26				447							
				2451	19							
	29			2471	5709							
	30			2491	411							
					535							
					25							
May	2			2531	11050	45						
					2476							
					1510							
					1640							
	10			2551	130							
	11			2571	967							
	17			2591	140							
	24			2611	104630							
	27				2454							
				2634	59125							
June	7			2651	1215	57						
					270							
	14			2671	335							
					713							
	17				577							
					695							
					12677	25						

## Cormorants

1921	17	3	Amey fnd	234	12677	25	1922	11	By Balance	236	14737	75
June			Land	2291	2945							
	19				4426							
	20			2301	61214							
	22				308							
	27			2351	2254							
July	10			2371	11667							
	11			2391	363							
	12			2431	83311							
	31				754							
				2551	555							
Aug	2			2591	13720	45						
	3				24583							
	9				2194							
				2931	45							
				2951	61							
					5143							
	21			2991	505							
					60							
					45							
	22				413							
	24			3011	103							
	25				21704							
	27			3051	151							
	30			3071	3071							
Sept	6			3091	131	135						
	20			3131	170							
					150							
	24			3151	4037							
	26			3171	541							
					640							
					13924							
	3			3211	20241							
	5			3231	1740							
					195							
	15				255							
					45							
					4115	45						
Oct	6			3231	6769							
					5844							
	7			3251	591							
					44							
					40606							
	1			3271	445							
					660							
					14737	75						

*bonnyers*

1900 April	1	To balance	55-1473775	1900 June 30 of month	97	4000.00
		10737-75		1900 June 30, Dec 22	103	10232.75
			1473775			1473775



## Coal Grinding

May	22	3	Balanced	2354	177.00	May	9	3	Long form	345	142.59	26
	27		Load	2354	18.71							
	29			2354	54.59							
	30				50							
June	2			237	12.50							
	3				20.44							
	6			2394	16.54							
	12				54							
	14			2414	17.54							
	17				17.74							
	25				13.77							
	26			2431	2.63							
	28				4.45							
	29				45							
	30				2.51							
July	2			2474	50.27							
	3				24.5							
	4			2494	1.94							
	5			253	1.10							
	6				1.20							
	7				1.16							
	8				57.4							
	10			255	42							
	11			257	44.01							
	12				30.12							
	17			259	76							
	24			261	66.54							
	27				16.40							
	28			263	4.63							
Aug	7			265	12.50							
	17			267	70							
	18				40							
	19			269	2.08							
	20				2.54							
	21			271	1.20							
	22			273	194.61							
	27				67.93							
	28			275	11.90							
Sept	11			277	12.50							
	12			279	71.39							
	13				19.17							
	14			283	64.42							
	15				11.00							
	16			285	20.00							
	17			287	11.64							
	18			293	62.00							
	19				6.25							
	20				142.59							

142.59 26

## Coal Grinding

1941 Aug	9	3	Long form	344	142.59	26	1942 Aug	31	3	Balanced	142.51	04
			Load	295	17.59							
	21			299	2.05							
					54.15							
					14.62							
	22			301	15.26							
	25				65.24							
	29			305	1.60							
Sept	6			309	14.77							
	20			313	2.35							
					4.65							
	24			315	14.00							
Oct	5			321	14.50							
	5			323	40.76							
	6			325	1.50							
Nov	6			331	14.00							
					7.65							
					5.70							
	7			335	2.36							
	12			337	28.03							
	14			341	1.50							
	22			343	15.90							
Dec	17			347	14.33							
1942 Jan	5			353	14.10							
	7			371	25.07							
	29			375	14.50							
Feb	25			381	14.40							
					14.51							
Apr	1	3	Balanced	142.51	04	1943 June	30	3	Balanced	142.51	04	
July	12		Load	27	14.50							
1944 June	1		2d W. T. T. T.	150	6.94							
					142.51							
					142.51							

## Wire Buildings

1901	May	30	3	Bar	54 6947.02	1901	May	24	3	Bar	49 5 80
		1		Bar	233.8 544.10			1		Bar	50 25
	Apr	2			227.7 55.52		Aug	1		Bar	50 4650.92
		1		Bar	461 150.207						
		10		Bar	963.91						
		17		Bar	241. 16.00						
		19			140						
		28		Bar	471 1589.61						
		26		Bar	258.0 16.10						
		29			32.50						
					247. 169						
		30			589.6						
					17.37						
					249. 220.63						
					6.00						
Aug		9		Bar	40 2255.54						
		10		Bar	155. 55.06						
		11		Bar	49 585.70						
				Bar	257. 26.00						
		17			259. 2.82						
					6.77						
		24		Bar	49 1372.76						
		27		Bar	261. 26.15						
June					265. 170.05						
		7		Bar	50. 1250.51						
		12		Bar	51. 503.03						
		14		Bar	227. 157.4						
		17			26. 26						
					259. 24						
					352.5						
		19			271. 55						
		24		Bar	51 1427.62						
		29		Bar	255. 12.50						
July		6		Bar	52 1084.62						
		9		Bar	53 443.05						
		10		Bar	277. 32.40						
		11			279. 25.75						
		12			261. 243.49						
					2.80						
					243. 3.15						
		24		Bar	53 1129.45						
		31		Bar	243. 155.55						
Aug		1		Bar	54 1423.09						
				Bar	330.52						
					464.47						

464.47

## Wire Buildings

1901	May	1	3	Bar	550 5610.92	1901	May	10	3	Bar	59 68
		2		Bar	247. 91.52			1		Bar	654 62.63
		3			279. 230.42			2		Bar	352 101.42
		7			291. 58.44			2.5		Bar	
					293. 15.14						
		9			25.00						
		16			297. 10.54						
					N 643.35						
		21			27.50						
					299. 1.05						
		23		Bar	57 1105.16						
		24		Bar	303. 73.00						
		30			307. 36.67						
May		6			309. 25.00						
		7		Bar	54 1369.26						
		10		Bar	59 317.25						
		12		Bar	311. 27						
					91642.10						
		20			313. 5.00						
		16		Bar	59 1076.80						
		26		Bar	315. 10.74						
					104.40						
					317. 45.34						
		27			318. 1.27						
May		3			321. 5.00						
		10		Bar	62 646.03						
		12		Bar	63 1202.44						
		21		Bar	327. 40						
					586.4						
		23		Bar	63 1333.15						
		27		Bar	329. 292.59						
					272.43						
May		1			331. 37.15						
					12.16						
		6			333. 25.00						
		7			335. 3.74						
		11		Bar	65 1267.45						
		12		Bar	66 969.44						
		14		Bar	337. 12.16						
					339. 34.25						
					30						
		15			341. 7.90						
		22			342. 59.60						
		23		Bar	67 1336.53						
					10157.72						

10157.72

## New Buildings

1901	23	By Bureau	5511011121	1901	4	By Bureau	70 1173 20
May	30	bad	545. 200	10	By Bureau	74 240	
			547. 5471	23		77 65	
Jun	4		551. 2735	15	By Bureau	553 12447	
	9	By Bureau	70 1339 12				
		bad	551. 647				
	11	By Bureau	71 1705 45				
		bad	551. 290 40				
			553. 197				
	14		553 502 61				
	21	By Bureau	71 2566 77				
	23	bad	557. 154 27				
			550 15				
			57 252 40				
			559. 146 02				
1902	25		575				
Jan	3		551 1135 45				
			563. 223 59				
			113 34				
	6		49 50				
	8		565. 128 04				
			440 46				
			94 10				
	9		567. 9 60				
			1155				
	10	By Bureau	74 2440 63				
	14	bad	567. 42				
			560 42				
			569 24 07				
			77 4				
			7 61				
	15	By Bureau	76 2294 91				
	22	bad	571. 99 00				
			6 25				
	23	By Bureau	77 2551 42				
	29	bad	573. 58 44				
July	1		77 14632 36				
	3		77 2 20				
			1251 04				
			58 44				
			59 6				
	7		579. 60 00				
	12	By Bureau	74 2517 40				
	12	By Bureau	77 1799 79				
	15	bad	571. 54 67				
			12566 92				

12566 92

## New Buildings

1901	15	By Bureau	552 1249 27	1901	21	By Bureau	74 440 10
July	24	By Bureau	54 2565 01	24	By Bureau	77 770	
	27	bad	553 2569 21	31	By Bureau	13730 436	
Aug	3		555 3770				
			5601				
			29555				
			2664				
	7		5678 543 49				
		By Bureau	54 1950 36				
	12	By Bureau	52 911 29				
	15	bad	509. 52 40				
	21	By Bureau	52 492 124				
		By Bureau	57 49 49				
	24	By Bureau	53 2622 57				
	25	By Bureau	54 263 66				
	27	bad	579. 1473				
			571. 44				
	28		573. 244				
			13772 16				
Aug	1	By Bureau	11730 436	Aug	18	By Bureau	74 440 10
	2	bad	1 415 45	19	By Bureau	54 440 10	
	3		2 26 1				
			16 59 1				
	7		3 13 62				
			224 50 1				
			1970 1				
			761 1				
			16 12 00 1				
	4		4 1 00 1				
			200 1				
	9		5 40 33 1				
			242 34 1				
			500 1				
			179 1 1				
	10	By Bureau	10 275 20 1				
		bad	6 9 11 1				
	11		7 42 32 1				
			177 25 1				
			560 1				
	12	By Bureau	16 41 62 1				
	17	bad	9 26 79 1				
			7 15 1				
			10 262 90 1				
			135 45 1				
	19		430 67 59				

430 67 59

## New Buildings

1902	Apr 19	2	Bureau	553143501.57	1902	May 9	by hand	15	2.03
			land	101.564.15	1902	June 10	by hand	94	4.00
		21		121.131.01	1902	July 25	Bureau	55570295.56	
				52.73					
		24		97.02					
		25	Pay hand	27.2649.03					
		27	land	13.109.1					
				14.61.02					
May	1			12.46.07					
				13.09					
	7		by hand	90.326.45					
	9		land	1.58.12					
	21		land	16.292.10					
				29.75					
				131.52					
				17.17.40					
	22			14.64.67					
				126.69					
	24			19.99.00					
	27		Pay hand	41.30.24					
			land	20.67.94					
June	7			21.64.75					
				62.57					
	10		by hand	94.3019.53					
	12		land	95.1032.43					
	13		land	40					
	24			28.529.01					
	25			19.62					
			Pay hand	91.2629.57					
	27		land	44.95					
				59.5					
July	1		by hand	97.3365.35					
	10		land	94.903.34					
	12		land	26.197.55					
				260.75					
				509.41					
	22			220.550.50					
	23			703					
				29.249.50					
				137.70					
			Pay hand	99.1627.26					
	25		land	50.115.43					
				75					
				216.70					
				90301.61					

79301.61

## New Buildings

1902	July 5	2	Bureau	55570295.56	1902	July 5	by hand	100	1.45
			land	101.564.15					
		9	Pay hand	107.1110.35					
		11	land	112.4943.4					
		25	land	26.500					
		25	Pay hand	103.627.17					
		27	land	36.735					
Aug	1		Pay hand	105.265.52					
			land	50.49.50					
				20.00					
				59.24					
	10		land	106.519.09					
	19		land	39.290.95					
				47.90					
				21.21.6					
	20		Pay hand	107.527.19					
	27		land	105.24.12					
Oct	4		land	42.49.50					
				48.40					
				45.76.5					
			Pay hand	109.559.60					
	11		land	110.1204.33					
	22		Pay hand	111.501.76					
Nov	2			112.702.29					
	20		land	50.50					
				29.70					
	22		Pay hand	114.109.66					
Dec	6			115.224.75					
	10		land	116.246.14					
				1.231.64					
	15		land	50.66.41					
	23		Pay hand	120.643.10					
	27		land	121.16.90					
1903	2		land	61.294.25					
Jan	2			11.42					
	12		Pay hand	124.415.09					
	14		land	0.182.44					
	15		land	125.115.1					
			land	62.250.1					
	21			62.74.41					
	24		Pay hand	126.520.62					
			land	64.17.62					
Feb	2			62.546.76					
				2.00					
				69.47.52					

300.24.44  
11.11.1111.11.11  
11.11.11  
11.11.11

11.11.11

## Mill Buildings

1902	Jan	2	By Balance	555293602.73	1903	Jan 30	By Balance	7450042563.0
		10	Coal	67. 21052				
		16	"	69. 29660				
		"	"	" 500				
		"	"	" 50				
		11	By Cash	124. 54913				
		13	By Cash	129. 19927				
		24	Coal	70. 990				
		25	By Cash	29. 44106				
May		13	By Cash	72. 55155				
		7	"	74. 21169				
		20	By Cash	132. 23481				
		"	By Cash	133. 14667				
		"	By Cash	" 4935				
		21	By Cash	135. 18612				
Apr		11	By Cash	135. 19107				
		13	By Cash	139. 16051				
		17	Coal	76. 532				
		18	"	77. 500				
		23	By Cash	141. 26766				
		24	Coal	44. 1000				
May		7	By Cash	143. 17167				
		13	Coal	23. 22960				
		14	By Cash	144. 50				
		"	By Cash	145. 1762				
		"	Coal	45. 51939				
		"	"	" 792				
		27	"	46. 792				
		28	By Cash	147. 56622				
June		2	Coal	77. 17392				
		6	By Cash	149. 60571				
		9	By Cash	151. 61521				
		11	By Cash	152. 92251				
		21	Coal	93. 54201				
		24	By Cash	156. 91751				
		25	Coal	94. 942				
				50042563				
				50042563				



## Store Book

1901	12	By Balance	2494 68	1901	23	By (due)	474 191
May	17	Bank	244 50	May	2	By Balance	109 154 92
	19		2434 56 51				
			14424				
	23	By (due)	474 95 72				
	26	Bank	2434 50 62				
			157				
			236 55				
			776				
			7164				
			822				
			7463				
			1549				
			647				
			140				
			3593				
			2201				
			159 13				
			1100				
			3775				
			1303				
			675				
			4440				
			661				
			383				
	29		274 12 93				
			3954				
	30	Found by by	474 7 50				
		Bank	274 2 94				
			194				
			244				
			146				
			5436				
			1504				
			1404				
			266				
			1534				
			639				
			4742				
			3904				
			7644				
			539				
			2656				
			1854 38				
			172				
May	2		2556 57				

## Store Book

1901 May	2	By Balance	350 154 96	1901 May	11	By Balance	491 149 45
		Bank	250 35		17	By Balance	160 770 23
			1414				
			602				
			2907				
			2179				
			373				
			1250				
			10471				
			165				
			540				
			2761				
			47647				
	9	By (due)	40 102 12				
	10	Bank	155 104 72				
			1414				
			2300				
			1154				
			392				
			3575				
			525				
			3302				
			33635				
			3969				
			170				
			104				
			1934				
			116				
			10191				
			2450				
			20				
			1293				
			1944				
			1075				
	11		2450				
	18		5444				
			209				
	7		1472				
			209				
			414				
			6722				
			1617				
			371				
			162				
			106654				

## Store Record

1901				1901			
Aug	17	3 Bacon	5770.63	June	1 of Bay View	50	10.49
		baul	259. 2.50	12	Quinine	51	190.476
			2.43	20	Bacon	51	50.12.63
	24	Bay View	49 100.43				
		baul	261. 59.61				
			21.70				
			22.10				
			6.62				
			9.45				
			93.99				
			15.44				
	27		76.6				
	30		263. 4.55				
			57.33				
			27.19				
			23.25				
			31.85				
			30.52				
			576				
			24.6				
			4.00				
			42.65				
June	5		265. 46.25				
			3.01				
	7	Bay View	50. 47.99				
	14	baul	265. 77.3				
			267. 54.52				
			27.72				
			24.06				
	17		47				
			269. 95				
			16.20				
	19		39.24				
			6.25				
			81.59				
			3.53				
			271. 2.60				
			14.15				
			162.59				
			20.96				
			18.29				
			46.92				
			10.23				
	20		2.99				
			9997.55				

9997.55

## Store Record

1901				1901			
June	20	3 Bacon	361. 50.12.63	July	6	Bay View	52. 2.25
		baul	271. 13.35		9	Quinine	53. 107.505
			22.74		10	Bacon	52. 76.00.36
			3.90				
			2.65				
			41.36				
			26.70				
			1.13				
			25.45				
			30.14				
			24.6				
			493. 1.36				
			3.32				
			11.59				
			207.16				
			273. 11.05				
	24	Bay View	50. 16.26				
	26	baul	493. 1.05				
			6.52				
			5.40				
			94.29				
			6.62				
			275. 22.64				
			1.25				
			43.77				
			4.47				
			7.64				
			36.17				
			7.35				
July	27		277. 19.50				
			4.26				
			10.01				
			33.54				
	6	Bay View	52. 99.99				
	10	baul	277. 29.05				
			13.91				
			279. 6.18				
			57.0				
			10.5				
			29.04				
			29.2				
			5.25				
			11.45				
			1.30				
			9255.66				

9255.66

## Store Record

1901	July	10	2	Balsam	561	760856	1901	July	24	By Day (New)	581	253
		10		Leaf	279	14941	Aug	1			544	215
		11			20	225				Shandee	1240	471
		12				150	7			Balsam	383	642976
						599						
						1690						
						1207						
						767						
						502						
					213	441						
						514						
		13				1773						
		24		By (New)	53	11020						
		31		Leaf	210	1945						
Aug		1		By (New)	54	14523						
		2		Leaf	27	1441						
						3011						
						500						
						385						
						794						
						1200						
						441						
						313						
						21405						
						1934						
						6312						
					297	1334						
		5				2055						
		6				5494						
						903						
					291	390						
						60						
						1050						
						244						
						259						
						1424						
						4119						
		7				1047						
						520						
						510						
						1200						
						1475						
					293	561						
						12911						
						72915						

843915

## Store Record

1901	Aug	7	3	Balsam	522	642976	1901	Aug	24	By (New), Paid	564	729900
				Leaf	293	2193						
						422						
						2350						
						2400						
						6634						
						3295						
		9				205						
		12			495	300						
						130						
						214						
						1400						
						4852						
						476						
						406						
		14				990						
						60						
						5304						
					297	465						
						7033						
						344						
						1630						
						436						
						940						
						3316						
		21				250						
		22			297	5455						
						9354						
						675						
						231						
					301	122						
						270						
						410						
		23		By (New)	57	10611						
		24		Leaf	311	244						
						4410						
						541						
						390						
						3462						
						340						
						406						
						12						
						2294						
						666						
						729900						

729900

## Store Room

1901	Aug	29	By Cash	503	7299.12	1901	Aug	10	By Sundries	59	951.47
		25	Land	503	9.10			11	By Cash	59	158.4
					1.37			24	By Sundries	565	7899.00
					1.10						
					10.20						
					47.05						
					3.03						
					3.16						
					4.20						
					2.92						
					12.66						
				505	27.59						
					20.00						
					1349.44						
	29				44						
	30				33.20						
					1.80						
				507	22.14						
					3.30						
Sp	6			509	762.40						
	7	By Cash		509	97.25						
	12	Land		509	77.4						
					26.79						
					65.34						
					10.56						
					25.40						
					31.58						
					2.00						
					60.20						
					24.12						
				511	270.90						
					15.40						
					126.5						
					37.62						
					11.76						
					46.23						
					39.36						
					34.30						
20				513	4.00						
16	By Cash			59	95.00						
24	Land			513	3.54						
				515	6.65						
					3.90						
					20.96						
					4465.57						

4465.57

## Store Room

1901	Aug	24	By Balance	507	7899.00	1901	Aug	10	By Sundries	62	105.410
		"	Land	515	5.30			12	" By Cash	62	5.69
		"	"	"	10.17			24	" Sundries	366	10254.71
	26	"	"	"	60						
	"	"	"	"	17.22						
	"	"	"	"	91.01						
	"	"	"	517	25.44						
	"	"	"	"	6.75						
	"	"	"	"	20.00						
	"	"	"	"	20.02						
	"	"	"	"	23.55						
	"	"	"	"	163.77						
	"	"	"	"	39.154						
	"	"	"	"	374.10						
	"	"	"	"	16.710						
Aug	24	"	"	519	9.60						
"	5	"	"	321	99.73						
"	"	"	"	"	114.54						
"	"	"	"	"	6.15						
"	"	"	"	"	24.03						
"	"	"	"	"	103.4						
"	"	"	"	"	2.90						
"	12	By Cash	"	634	85.65						
"	21	Land	"	325	53.45						
"	"	"	"	"	1.71						
"	"	"	"	"	408.20						
"	"	"	"	"	12.45						
"	"	"	"	"	191.09						
"	"	"	"	"	3.22						
"	"	"	"	"	44						
"	"	"	"	327	13.50						
"	23	By Cash	"	63	90.42						
"	29	Land	"	327	10.43						
"	"	"	"	"	124.45						
"	"	"	"	"	22.03						
"	"	"	"	"	163.22						
"	"	"	"	"	17.93						
"	"	"	"	329	7.5						
"	"	"	"	"	2.23						
"	"	"	"	"	3.90						
"	"	"	"	"	174.34						
"	"	"	"	"	3.33						
"	"	"	"	"	34.40						
"	"	"	"	"	27.50						
					11814.30						113.245

11814.30

## Shore Room

1901	29	By	Bureau	5657025471	1901	11	By	By the	65	31	15
			Land	529	2194		12	By	66	20	31
					1644		14	By	567	969440	
1901	1			381	3360						
					175						
					761						
					640						
					165						
					380						
					41						
					275						
					8464						
					1676						
6				533	992						
7				585	737						
					2495						
					5534						
					2620						
					25734						
					272						
					559						
					1372						
					665						
					7176						
11				337	25						
11		By the		65	10267						
14		Land		347	2440						
					4080						
					1289						
					2901						
					3472						
					700						
				347	259						
					7500						
					5451						
					294						
					2875						
					4201						
					43						
					2751						
					6212						
					507						
					3469						
					927						
					1175065						

## Shore Room

1901	14	By	Bureau	566	969440	1901	12	By	By the	29	2257
			Land	341	110520				9	70	150
					106						
					565						
					650						
					955						
					92410						
					495						
					271						
					65313						
15					29	2925					
24		By the		4421							
27		Land			2242						
					514						
					1795						
				345	2265						
					25311						
					644						
					349						
30					700						
					5122						
					465						
					1330						
					2553						
					6449						
					215						
					514						
					2051						
					2700						
					347	133					
34				449	2244						
					976						
					25						
					183						
					40						
					1510						
					873						
					3069						
5				347	6499						
9		By the		71	9499						
		Land		347	7375						
					9451						
					6341						
					2079						
					12460						

## Store Record

1901	9	30	Balsam	567	12445	72	1901	11	By Sundine	71	13404	19
2nd	11		Coal	557	23	15	21	By Sundine	72	14	30	
					1275	1901	21	By Sundine	79	11077	97	
					204	56						
				557	95	17						
					36	00						
					42	5						
					20	55						
					51	42						
					4	10						
					24	98						
					50							
				557	6	05						
					7	50						
					1	00						
					16	19						
					35	26						
					16	17						
					12	44						
					7	57						
					52	55						
					1	24						
					71	10	41					
			By Sundine	557	5	09						
			Coal		89	60						
					2	91						
					17	3						
					9	50						
					24	47						
					55	25						
					49	07						
				557	35	26						
					18	40						
					10	78						
					20	09						
					7	07						
				561	14	3	19					
					46	54						
					2	50						
					31	32						
					40	42						
					57	43						
					39	40						
				413	12	57						
					144	27	10					

1901  
July 3

24427 16

## Store Record

1901	8	30	Balsam	567	11077	97	1901	10	By Sundine	74	59	25
2nd			Coal	563	20	53	15	By Sundine	76	42	13	11
					53	75		By Sundine	77	24	40	
					72	05		Balsam	79	14	60	21
					2	45						
					49	75						
					15	07						
				565	1	71						
					3	08						
					17	49						
					23	15						
					116	34						
					46	19						
					175	46						
					443	40						
					176	15						
				9	55	70						
					22	40						
					100	49						
				567	2	65						
					5	61						
			By Sundine	74	14	57						
			Coal	567	12	25						
					32	09						
					25	57						
					36	34						
					18	50						
					119	1						
				569	14	00						
					64							
					46	13						
					127							
					13	98						
					4	20						
					65	55						
					18	78						
					12	53						
					12	47						
				571	35	54						
			By Sundine	77	14	00						
			Coal	573	7	57						
					2	59						
					9	15						
					47	12						
					1324	097						

1901  
July 3

13240 97

## Stone Room

Apr 27	2, Balance	169.19	60.21	77.4	10
	Card	57.8	72	1606.1	53
			17.26	12	72
			4.66	24	75
			15.07	12	75
			50.54	27	45
			25.40		
			62.51		
29		57.8	2.63		
46		57.9	21.42		
			12.6		
			44.33		
			106.21		
		479.	40.05		
			10.40		
7	By Cash	7.7	191.25		
12	Card	34.	145.45		
24	By Cash	7.	139.22		
100	Card	345.1	52.46		
			54.02		
			4.02		
7			130.04		
			20.94		
		37.	52.06		
			17.12		
			5.70		
			63.15		
			14.03		
			4.50		
			9.50		
1	By Cash	21.	130.02		
21	By Cash	22.	9.1		
24	By Cash	24.	139.02		
27	Card	379.	7.49		
			26.96		
			15.00		
			19.6		
			95.25		
			3.75		
			10.30		
			15.35		
			12.5		
			91.25		
31			4.00		
			112.579		

112.579

## Stone Room

Apr 27	2, Balance	1846.45	1846.45	31	By Balance	2043.42
	Card	391.	3.70			
			12.00			
			14.00			
27			3.25			
		379.	4.90			
29	Card	22.	134.79			
31	Card	379.	16.15			
			2043.42			
Apr 1	2, Balance		2043.42	Apr 9	By Cash	3305.14
1	Card	1.	6.50			
			120.1			
			42.10			
		2.	53.75			
			30.44			
3			2.99			
7		3.	9.61			
			27.94			
			11.70			
			31.22			
			17.5			
			5.40			
			31.16			
		4.	27.60			
			73.62			
			47.02			
			17.43			
			7.60			
			6.30			
			4.00			
			44.20			
			4.59			
			23.65			
9		5.	160.50			
			14.00			
			5.53			
			72.30			
			14.20			
			43.34			
			120.1			
			4.00			
		6.	6.10			
			95.40			
			30.59			
			3405.14			

3405.14





## Store Record

1912 May	7	3, Longford	173	7253	57	1912 May	10	of London	901	27	947
		Barb	15	1185	7		12	Baranum	175	7862	57
				8485							
				50							
				1100							
				2060							
				9711							
				2695							
				750							
				9859							
				627							
				400							
				3400							
				513							
		Brickbury	27	2210							
		Bay Area	90	13210							
		Refining	91	4259							
		Barb	16	43097							
				2365							
				375							
				46945							
				1017							
				750							
				26967							
				70							
				2214							
				775							
				1979							
				1817							
				2050							
				1024							
				5520							
				1772							
				5125							
				160							
				400							
				160							
				465							
				4107							
				5960							
				1475							
				267							
				3357							
				24755							
				1044204							

1044204

## Store Record

1912 May	22	2, Baranum	574	765257	1912 June	10	of Longford	944	3007
		Barb	15	325		12	London	951	336133
				1255		26	Admiral's	964	105
				9130		27	Baranum	176	265165
				143					
				907					
				1069					
				2330					
				325					
				1400					
				110					
				22261					
				19					
				500					
				242					
				2375					
				1070					
		27, Bay Area	914	13415					
		29, Barb	20	1255					
				1960					
				2540					
				4567					
				1092					
				15114					
				21					
				24056					
				5552					
		10, Bay Area	944	12009					
		13, Barb	22	2044					
		20, of London	95	78263					
				8463					
		25, Barb	22	12958					
		27, Bay Area	91	650					
				570					
				1030					
				5919					
				550					
				400					
				471					
				362					
				253					
				4710					
				1200					
				9444					
				1500					
				650					
				2033					
				1804522					

1804522

## Stone Record

1980	27	3	Bacane	17	863197	10	3	Sturte	942642	14
June			bad	24	12755	12	3	Bacane	477	5843 60
					4025					
					7962					
					5272					
					6764					
					2341					
					1390					
					253					
					12620					
					57					
				25	2066					
					1723					
					9541					
					1407					
					390					
					975					
					775					
					960					
					216					
					13025					
					700					
					3750					
					150					
July	1		by dew	77	175741					
	10		bad	26	176141					
					4397					
					120					
					6422					
					125					
					622					
					2135					
					375					
	12				22244					
				27	5407					
	15				1135					
					620					
					1113					
					7271					
					507					
					9562					
	24			25	1603					
					1690					
					11724					
					502594					

502594

## Stone Record

1980	22	3	Bacane	17	863197	10	3	Sturte	942642	14
July			bad	24	12755	12	3	Bacane	477	5843 60
					4025					
					7962					
					5272					
					6764					
					2341					
					1390					
					253					
					12620					
					57					
				25	2066					
					1723					
					9541					
					1407					
					390					
					975					
					775					
					960					
					216					
					13025					
					700					
					3750					
					150					
Aug	1		by dew	77	175741					
	10		bad	26	176141					
					4397					
					120					
					6422					
					125					
					622					
					2135					
					375					
	12				22244					
				27	5407					
	15				1135					
					620					
					1113					
					7271					
					507					
					9562					
	24			25	1603					
					1690					
					11724					
					502594					

502594

## Rooster

1901	25	2 1/2 Cans feed	215.24	490.20	Aug	2 1/2 Cans feed	179.47	070.73
Aug	29	1 Can	24.74	24.93				
	30			47				
				2.93				
Aug	2		25.1	14.17				
				85				
				2.91				
	10		25.5	4.40				
				2.01				
			27.1	21				
	11			6.91				
				6.90				
	17		27.9	7.91				
	24		26.1	32.42				
	27			5.41				
			22.3	21.33				
	30			17.1				
				4.27				
June	7		26.5	34.66				
				46.13				
	14			2.76				
	17		26.7	27.92				
				3.63				
			26.9	13.50				
				35.11				
				40.62				
	19			19.33				
	20		27.1	21.55				
			27.5	7.20				
				63.03				
	22			75.75				
				60				
	26			51.50				
July	10		27.9	50.61				
	11		25.1	4.50				
				36.63				
				13.42				
	12			13.39				
			22.3	590.41				
	31			26.75				
				4.75				
				151.59				
			22.5	151.67				
Aug	2		14.7	10.70				
				103				
				2907.93				

## Rooster

1901	2	2 1/2 Cans feed	215.24	490.20	Aug	2 1/2 Cans feed	179.47	070.73
Aug	7	1 Can	24.1	24.61				
			24.1	42.69				
	9		24.3	67.02				
			24.5	93.40				
				263.31				
	12			6.71				
	21		27.9	15.93				
				72.77				
				75.99				
	22		27.7	1.49				
	24		30.1	5.31				
				11.1				
	25			7.38				
			30.3	1.47				
				10.10				
			30.5	1.40				
	29			72.58				
				50.24				
	30			11.76				
			30.7	1.50				
Sept	0		30.9	2.71				
	12		31.1	83.40				
				13.96				
				27.16				
	20		31.3	15.49				
				123.61				
	26		31.7	3.20				
				2.40				
				60.40				
				39.39				
			31.9	129.75				
Oct	3		32.1	29.23				
				19.25				
				24.76				
				343.29				
	5		32.3	61.34				
				82.19				
	15			65.02				
				66.23				
	21		32.5	74.43				
				2.50				
				27.45				
	27		32.7	113.36				
				3013.520				

## Roaster

[illegible]

## Cementing Op

1915	Jan 30	23	Bar 22	20	106.70	600	1000	9	By Cash	55	60
								2	186 444.10	131	315.00
								9		170	105.00
								10		329	367.45
								11		115	173.25
								13		204	294.00
								26		270	222.50
								27		250	278.00
								28		222	401.10
								30		300	315.00
								31		300	352.50
								Apr 1		300	371.70
								2		261	374.00
								3		271	409.50
								4		270	315.00
								10		250	187.50
								11		150	139.15
								25		250	141.85
								29		250	315.00
								30		250	367.50
								May 30		250	1225.50
								1		250	24.15
								Jan 30		250	324.00
											106.70 60
											117 444.10
											106.70 60

## Bills Payable

1902	25	To Cash	22	465.47	1902	25	To Cash	1	577.40	15
1902	17		27		1902	25	To Cash	2	507.74	42
	21				1902	29	To Cash	3	592.50	
	21		24	122.51	1902	29	To Cash	3	592.50	
				532.74	1902	31	To Cash	4	567.69	
				245.94	1902	31	To Cash	5	571.11	09
23	Chambers	99	253.93	Chs	30			6	569.12	79
25	Cash	29	346.42	Chs	31			7	571.11	09
				213.70						
25			31	512.50	00					
30	Chambers	100	115.14	15						
31	Cash	32	125.00	00						
Aug	6	W. H. Thompson	10	125.00	00					
		Cash	33	221.50	50					
4				109.39	70					
14			34	222.06						
				75.00	00					
25	Chambers	102	76.49	21						
27	Cash	36	51.00	00						
31	Chambers	103	25.00	00						
6	Cash	37	51.04	33						
12			39	125.00	00					
17				50.00	00					
17	W. H. Thompson	107	60.00	00						
22	Chambers	108	125.00	00						
24	Cash	41	60.00	00						
27	Chambers	109	16.29	13						
29	Cash	43	40.46	97						
				125.00	00					
30				67.31	55					
12	W. H. Thompson	112	147.50	00						
3	Cash	44	159.77							
11			46	125.00	00					
14				73.64						
23			48	125.00	00					
				75.00	00					
24	Chambers	113	110.44							
	Cash	49	151.29							
30	Chambers	114	13.23							
19	Cash	50	357.64							
21				155.00						
25			51	346.96						
				142.13						
				548.21	72					

## Bills Payable

1902	25	To Cash	14	125.00	17	1902	25	To Cash	34	672.61	47
25	Cash	51	125.00	00		1902	29	Chambers	1	503.47	03
29	Chambers	52	110.44	35	00		31	Chambers	1	503.47	03
	W. H. Thompson	53	122.72				31	Chambers	1	503.47	03
	Chambers	54	512.02	00			31	Chambers	1	503.47	03
31	Chambers	55	512.02	00			31	Chambers	1	503.47	03
31	Chambers	56	512.02	00			31	Chambers	1	503.47	03
31	Chambers	57	512.02	00			31	Chambers	1	503.47	03
31	Chambers	58	512.02	00			31	Chambers	1	503.47	03
31	Chambers	59	512.02	00			31	Chambers	1	503.47	03
31	Chambers	60	512.02	00			31	Chambers	1	503.47	03
31	Chambers	61	512.02	00			31	Chambers	1	503.47	03
31	Chambers	62	512.02	00			31	Chambers	1	503.47	03
31	Chambers	63	512.02	00			31	Chambers	1	503.47	03
31	Chambers	64	512.02	00			31	Chambers	1	503.47	03
31	Chambers	65	512.02	00			31	Chambers	1	503.47	03
31	Chambers	66	512.02	00			31	Chambers	1	503.47	03
31	Chambers	67	512.02	00			31	Chambers	1	503.47	03
31	Chambers	68	512.02	00			31	Chambers	1	503.47	03
31	Chambers	69	512.02	00			31	Chambers	1	503.47	03
31	Chambers	70	512.02	00			31	Chambers	1	503.47	03
31	Chambers	71	512.02	00			31	Chambers	1	503.47	03
31	Chambers	72	512.02	00			31	Chambers	1	503.47	03
31	Chambers	73	512.02	00			31	Chambers	1	503.47	03
31	Chambers	74	512.02	00			31	Chambers	1	503.47	03
31	Chambers	75	512.02	00			31	Chambers	1	503.47	03
31	Chambers	76	512.02	00			31	Chambers	1	503.47	03
31	Chambers	77	512.02	00			31	Chambers	1	503.47	03
31	Chambers	78	512.02	00			31	Chambers	1	503.47	03
31	Chambers	79	512.02	00			31	Chambers	1	503.47	03
31	Chambers	80	512.02	00			31	Chambers	1	503.47	03
31	Chambers	81	512.02	00			31	Chambers	1	503.47	03
31	Chambers	82	512.02	00			31	Chambers	1	503.47	03
31	Chambers	83	512.02	00			31	Chambers	1	503.47	03
31	Chambers	84	512.02	00			31	Chambers	1	503.47	03
31	Chambers	85	512.02	00			31	Chambers	1	503.47	03
31	Chambers	86	512.02	00			31	Chambers	1	503.47	03
31	Chambers	87	512.02	00			31	Chambers	1	503.47	03
31	Chambers	88	512.02	00			31	Chambers	1	503.47	03
31	Chambers	89	512.02	00			31	Chambers	1	503.47	03
31	Chambers	90	512.02	00			31	Chambers	1	503.47	03
31	Chambers	91	512.02	00			31	Chambers	1	503.47	03
31	Chambers	92	512.02	00			31	Chambers	1	503.47	03
31	Chambers	93	512.02	00			31	Chambers	1	503.47	03
31	Chambers	94	512.02	00			31	Chambers	1	503.47	03
31	Chambers	95	512.02	00			31	Chambers	1	503.47	03
31	Chambers	96	512.02	00			31	Chambers	1	503.47	03
31	Chambers	97	512.02	00			31	Chambers	1	503.47	03
31	Chambers	98	512.02	00			31	Chambers	1	503.47	03
31	Chambers	99	512.02	00			31	Chambers	1	503.47	03
31	Chambers	100	512.02	00			31	Chambers	1	503.47	03

## Orange Office

1901	12	3	Am. Fed	25	20495.70	1901	27	3	Am. Fed	27	1425
July			Land	253	470	Aug	31		Land	27	23611.02
	21				70.66						
					47.43						
Aug	1			27	416.66						
	3			27	1.00						
					75.00						
	6			29	12.65						
	7				1.16						
				29	4.00						
	9				50.43						
					50.42						
	11			27	58.43						
				27	50.42						
					53.93						
	14			30	19.45						
	15			30	2.75						
	19			30	93.76						
					46.92						
					416.66						
Sept	6			30	75.00						
				30	46.93						
	20			30	53.93						
					46.93						
	24				2.96						
				30	7.05						
					82						
	26			31	14.61						
	1				10.42						
Oct	30			31	416.66						
	3			31	4.00						
				31	75.00						
	5				44.59						
					42.50						
	15				60.00						
					77.50						
	21			32	40.00						
					50.30						
					71.12						
					14.72						
	29			32	4.02						
				32	2.50						
					21.90						
					416.66						
	31				24632.30						

24632.30

## Orange Office

1901	1	3	Barren	34	23611.02	1901	14	3	Land	33	4470
Nov			Land	33	2.25	Nov	14		Barren	33	26041.63
					75.00						
	6				20.50						
					67.05						
	7			31	7.00						
					1.96						
					23.24						
					74.77						
				37	66.46						
	14				29.75						
					44.70						
				39	4.20						
					4.25						
				34	7.00						
					1.06						
					3.00						
	15				3.29						
				34	75.22						
					59.73						
	18			34	416.66						
					75.00						
					10.00						
Dec	4			34	4.25						
					5.00						
					2.00						
					3.22						
					4.45						
					2.69						
	5			35	67.02						
	11				4.25						
				35	9.76						
					17.54						
	13				62.46						
					60.00						
	26			35	60.46						
					58.07						
					416.66						
1902	1			36	75.00						
Jan					1.50						
	6			36	59.61						
	9			37	1.75						
				37	3.20						
	14				26050.83						

26050.83

Orange Office

1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	23
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Orange Office

1911	10	23	Amby, Fred	11	20	75.50	12	21	75.50
Off	11		Book	12		42.50	13	22	75.50
						13.21			
						4.75			
	21			11		27.50			
						5.00			
						6.71			
						2.10			
	24		Book			8.22			
						54.50			
						54.50			
						57.50			
	26			13		53.95			
						44.25			
	30			14		47.66			
						75.00			
May	22			14		29.55			
	24			19		56.66			
						57.50			
						57.00			
June	7			21		47.66			
						75.00			
						56.50			
						57.50			
						57.50			
	13			22		83.20			
						115.96			
	16					12			
	27			23		4.20			
	28			25		1.75			
July	3			26		30.67			
	10					8.40			
	12			27		416.66			
	15					1000			
	22			28		47.50			
	28			29		2400			
	28					57.50			
						57.50			
				30		57.50			
						57.50			
Aug	5			31		57.50			
						2.50			
						3.00			
						17.00			
						64			
						3409.69			
									31409.69



## Orange Office

1902 Aug 5	29	County fund	179,340.59	1902 Aug 7	29	Prison & bridge	109,150.00
		bank	33,16.50			bank	48,145.00
			34,75.00	Dec 19		Prison	29,341.86
			10.13				
Apr 27			36,22.00				
			32,115.50				
			57.50				
			57.50				
			57.50				
			116.46				
			39,57.50				
			57.50				
19			50,416.66				
			2.96				
			1.00				
			13.54				
Oct 4			12,55.50				
			57.50				
			57.50				
			53.50				
			65.00				
			59.75				
			72.20				
7			44,57.50				
			4.75				
			16.50				
			45,2.40				
11			46,21.60				
21			17,23.40				
			5.15				
			2.20				
22			44,75.00				
27			49,6.00				
28			50,157.50				
			60.64				
24			57.50				
			52.00				
			99.44				
			416.66				
29			10.00				
Dec 5			54,336.55				
6			8.00				
10			58,15.41				
12			57,416.66				
15			25.00				
19			54,52.00				
			34137.44				

236,52.49  
256,66.24

## Orange Office

1902 Dec 19	29	Baton	391,340.00	1903 Jan 30	29	Baton	50,500.00
		bank	54,53.50				
			52.50				
			52.50				
			51.42				
			75.00				
			75.00				
			59,159.61				
			150				
			199.01				
			3.25				
1902 Dec 25		W. S. Smith	121,133.32				
1903 Jan 16		bank	62,253.66				
			57.00				
			40.01				
			9.64				
			65,52.50				
Feb 7			66,75.00				
			69,52.50				
			75.00				
			70,3.20				
			71,8.00				
			101,416.66				
Mar 19		W. S. Smith	122,306.96				
		bank	74,61.69				
		W. S. Smith	122,2.00				
Apr 11		bank	77,500.00				
May 14		W. S. Smith	144,257.50				
		bank	44,1.20				
June 6		W. S. Smith	149,162.43				
		W. S. Smith	150,397.40				
		bank	17,500.00				
			69,253.73				
			20.24				
17		W. S. Smith	153,69.44				
19		bank	92,2.50				
23		W. S. Smith	155,252.44				
			39500.05				

39500.05



## Price Machinery

1921 Jan	2	Bureau	1922 Jan	10	By Pay chd	1923 Jan	10	By Pay chd
		bal.	195.290	15.10		197.224	497.95	
			365.	24.44				
				31.40				
	9		367.	29.00				
				4.00				
				10				
				4.55				
				1.50				
				2.69				
				2.90				
	10	Pay chd	74.	337.46				
	14	bal.	367.	61.54				
				62.40				
				2.73				
				211.46				
			369.	3.59				
				404.75				
				116.93				
				19.50				
				329.55				
				69.76				
				23.33				
				14.97				
				2.22				
				5.54				
			371.	513.90				
				210.59				
	15	Shorthand	76.	59.54				
	17	bal.	171.	76.04				
				59.26				
				231.95				
	12			115.50				
				19.54				
			175.	69.74				
	13	Pay chd	77.	446.64				
	14	bal.	175.	260.05				
				62				
				82.22				
				97.22				
				19.14				
	19			284.77				
			175.	97.13				
				17				
				4.43				
				412.95				
				224.99				

224.99 65

## Price Machinery

1921 Jan	29	2	Bureau	1922 Jan	10	By Pay chd	1923 Jan	10	By Pay chd
			bal.	375.224	497.95				
				375.224	497.95				
				313.73					
	1			267.20					
				142.97					
				242.60					
				69.16					
				47.17					
				102.4					
				39.10					
				30.45					
				53.13					
				57.20					
				16.15					
				79.20					
	5	Pay chd		75.15	56.20				
	12	Shorthand		19.	92.64				
	15	bal.		34.	27.50				
				30.77					
				42.79					
				5.99					
				12.16					
				58.96					
	24	Pay chd		54.93	61				
	27	bal.		304.46	152.32				
				56.44					
				385.	182.00				
				55.52	57				
				42.76	7.60				
				552.07					
				2112.519					
				1.25					
				24.15					
				2.92					
				9.12					
				10.23					
				12.49					
				159.94					
				34.56					
				139.70					
				107.43					
				4.25					
				193.54					
				257.24	97				

257.24 97

## Price Machinery

1902 March	7	3	Baran	5972571329	31	By Baran	2760924
	8		By Baran	7151505			
	12		Baran	119757			
	15		Baran	57 2729			
				1795			
				1939			
				597 13200			
				54655			
	21		Baran	25267256			
			Baran	100254			
			Baran	83452550			
			Baran	8310955			
	24		By Baran	505375			
	25		Baran	84527231			
			Baran	226990			
	27		Baran	597 200			
				5367			
				492			
				1435			
				531			
			597	552			
				9540			
				264			
				504			
				5141			
				1363			
				492			
				5537			
				54619			
				9269			
				72			
				135			
			595	13571			
				2297			
				1573			
				942			
				2760924			
1902 April	1	3	Baran	2760924	2	By Baran	2760924
	1		Baran	2540217417			2760924
			Baran	62271			
				500421			
				524945			
				77961			
				54491			
				29701695			29701695

## Price Machinery

1902 Apr			1902 May		
2	By Amos, James	29701695	9	By Amos, Fred	29701697
	Bar	1 42521			
		1 44941			
		252472			
		1744			
		79401			
		2 44111			
		2992			
		1374			
		151461			
		104261			
		60191			
		1363			
		16623			
		7641			
		5551			
		16641			
		3571			
		12471			
		37371			
		29574			
		95004			
		25637			
		7871			
		17031			
		600			
		9424			
		24461			
		4101			
		7411			
		1051			
		14144			
		1601			
		2001			
		957			
		27631			
		575			
		256001			
		311001			
		42051			
		32121			
		161041			
		124301			
		23431			
		29701697			



## Misc Machinery

1902 May			1902 June		1902 June
7	By Balance	41,324.51	7	By Balance	191 22.10
	Do	16,105.55		Do	413,447.62
		56.77			
		284.29			
		3.42			
		34.64			
9	By Cash	90,502.46			
10	Do	640.82			
21	Charging Balance	91,585.44			
	Do	16,584.66			
		53.88			
		120.71			
		11.91			
		355.34			
		13.40			
		1.55			
		28.16			
22		23.50			
		7.60			
		129.64			
		12.5			
		65.00			
		177			
		14.77			
		3.11			
		19.65			
		24.71			
		51.59			
24		21.29			
		24.00			
		25.71			
		5.92			
		100.50			
27	By Cash	91,521.74			
29	Do	90,462.84			
	Do	20 21.90			
		24.42			
		65.00			
		3.57			
		17.94			
June 7		47.00			
		7.71			
		13.71			
		53.00			
		24,474.50			

## Misc Machinery

1902 June		1902 June	1902 July		1902 July
7	By Balance	102,347.25	10	By Cash	94 4.00
	Do	21,125.00		Do	410,393.44
		23.12			
10	By Cash	94,552.10			
12	Do	95,964.50			
13	Do	22,142.29			
		54.55			
		43.07			
15		8,170.12			
20	By Cash	95,477.92			
25	Do	22,10.93			
	By Cash	96,505.56			
27	Do	23,177.5			
		10.55			
		16.15			
		2.25			
		11.79			
		1.09			
		46.00			
		1.24			
		32.10			
		1.66			
		65.56			
		49.10			
		24.73			
		343.53			
		12.16			
		89.00			
		2.39			
		46.35			
		25,169.63			
28		24.30			
		144.39			
		54.37			
		9.40			
	By Cash	97,443.31			
30	Do	95,556.02			
		95,556.02			
July 1	By Cash	97,475.07			
3	Do	96,124.60			
10	Do	113.4.93			
	Do	26,26.43			
		41.30			
		4.64			
		393,41.44			

Spring No 7

1991	23	2	Bacon	92	57039	58	1992	11	2	Bacon	50170	46
1992	1		Bark	577	19	58						
1992	5			561	10	58						
1992	6			563	16	90						
	6			565	19	58						
					16	72						
					5	95						
	6		Timberland	75	57039	58						
	10		Bay Area	74	204	11						
	15		Timberland	76	48	62						
	22		Bark	571	3	96						
					4	18						
	25		Bay Area	77	92	51						
	29		Bark	575	57	51						
29				577	20							
					190							
	7			579	50							
					264							
			Bay Area	78	545	54						
	16		Timberland	79	1595	57						
	18		Bark	581	13	11						
	24		Bay Area	81	385	51						
	27		Bark	583	77	72						
29	5			585	19	57						
			Bay Area	84	357	90						
	12		Timberland	85	175	54						
	15		Bark	589	79	2						
	24		Bay Area	86	311	42						
	25		B.A. Keweenaw		140	70						
	28		Bark	591	26	45						
					581	57						
					581	57						
1992	1	2	Bacon	50170	46		1992	12	2	Bacon	50170	46
			Bark	579	4							
				2	20							
	3				490							
	4			4	43	23						
	9			5	12							
	10		Bay Area	6	545	51						
			Bark	6	490	34						
					54	22						
	12			7	17	64						
					163	1						
			Timberland	86	583	92						
	14		B.A. Keweenaw	88	570	10						
					5177	57						
					5177	57						
					5177	57						

Spring No 7

1901	12	2	Amos photo	100	3779	23	1902	22	By Band	12	427
	21		Band	11	1200	Amos	21	Amos Band	91	4259	
	24			13	1339	Amos			4259		
	25		By Band	17	6937	21			4259		
	26		Band	13	25		22	By Band	4259	99	
	27			14	25						
Amos	1			15	3249	23					
	7			16	240						
	9		By Band	90	6245	1					
	10		Amos Band	1	4733						
	22		Band	14	3500						
				19	3453						
	24			19	2475						
	27		By Band	91	3396						
Amos	7		Amos Band	94	220	74					
			Band	21	1609	01					
					25						
	10		By Band	94	3554						
	12		Amos Band	95	4244						
	20		Amos Band	1	3440						
	25		By Band	96	4311						
July	27		Band	24	30						
	1		By Band	97	557	64					
	10		Amos Band	97	227	44					
	17		By Band	1	2535						
	23		By Band	99	3909	2					
	25		Band	30	175	44					
					25						
Aug	9		By Band	101	326	69					
	11		Amos Band	102	149	19					
	25		By Band	103	102	91					
Sept	1			105	165	46					
			Band	51	990						
				39	45						
	10		Amos Band	106	1409	6					
	16		Band	39	996						
	20		By Band	107	157	42					
Oct	24		Band	108	165	75					
				42	990						
				1	375						
	7			43	2970						
			By Band	109	165	96					
	11		Amos Band	110	1614	8					
	21		Band	46	3675						
	22		By Band	111	153	54					
				307	50	60					
										4073060	

## Piping 457

1922	23	Salmon	445.06	59.41	1922	14	Any fish	441.40	65.80	1923	30	Any salmon	443.17	15.2
Any	24	Salmon	49.40	7.00										
	1	Any fish	124.40	57.75										
	10	Salmon	50.40	7.91										
	22	Any fish	114.12	14.41										
	24	Salmon	50.40	7.41										
Dec	5	Any fish	53.40	7.63										
	1	Any fish	116.14	14.71										
	10	Struck down	114.40	57.40										
	1	Any fish	1	24.59										
	12	Salmon	56.10	1.50										
	15	Any fish	67.83	4.50										
1923	23	Any fish	120.10	15.63										
Jan	2	Salmon	61.49	19.41										
	5	Any fish	57.41											
	12	Any fish	124.12	12.52										
	14	Struck down	1	16.45										
	15	Salmon	62.10	1.00										
	21	Any fish	63.10	4.25										
	22	Any fish	64.10	2.97										
	24	Any fish	126.10	12.01										
	25	Salmon	64.10	4.45										
Feb	2	Any fish	66.10	2.51										
	7	Any fish	11.10	5.00										
	1	Any fish	1	1.21										
	11	Any fish	67.10	3.46										
	1	Any fish	68.10	3.01										
	1	Any fish	124.10	12.11										
	13	Struck down	129.10	15.04										
	24	Salmon	70.10	1.90										
	1	Any fish	129.10	9.54										
Mar	20	Any fish	130.10	7.46										
	1	Struck down	131.10	6.51										
	1	Any fish	1	12.17										
	25	Salmon	75.10	14.26										
	31	22.99	135.10	2.97										
Apr	11	Any fish	132.40	7.62										
	13	Struck down	119.10	1.53										
	14	Salmon	77.10	1.50										
	23	Any fish	80.10	5.60										
	1	Any fish	140.10	3.60										
	24	Salmon	81.10	1.57										
	1	Any fish	143.10	1.58										
May	14	Struck down	145.10	5.40										
			42.60	3.00										

## Piping

1932	14	Any fish	441.40	65.80	1933	30	Any salmon	443.17	15.2
	1	Salmon	45.40	4.47					
	10	Any fish	145.10	3.60					
	27	Any fish	146.10	1.99					
1934	2	Any fish	147.10	5.76					
	3	Any fish	148.10	1.99					
	4	Any fish	149.10	6.94					
	5	Any fish	150.10	12.00					
	9	Any fish	151.10	4.29					
	11	Any fish	152.10	15.31					
	24	Any fish	153.10	2.96					
	25	Any fish	154.10	1.50					
	27	Any fish	155.10	7.22					
			443.17	15.2					



## Insurance

Mar 1	3	Balance	944039.67	Mar 24	By bank	500	500
" 24		bank	500	" 31	Balance	405635	
" 27			371. 150				
" 28			1500				
			405635			405635	
Apr 1	By	Balance	405635	Apr 25	By drawing by	500	
" 4		bank	500	" 30	bank	500	
" 10			1000	June 11		10.50	
" 10			4071.55	Aug 6		50.00	
" 30			500	Oct 11		75.00	
" 13			500	Oct 14		25.00	
May 7			150	Oct 14		46.00	
June 3	By	Banking Warrant	94. 7561.54	" 25		49.00	
" 14		bank	22. 13.50	Dec 12		500	
" 10			26. 33.50	Dec 17		69. 112.00	
July 15			27. 13.50	Dec 30		44. 152.00	
" 23			29. 13.02	May 16		14. 14.50	
Aug 5			34. 62.75	June 27		75. 148.00	
" 6			34. 50.00	" 30	bank	30. 147.00	
Oct 1			39. 63.45				
" 11			7.00				
Oct 7			43. 63.45				
" 16			44. 14.00				
" 27			46. 6.00				
" 27			47. 72.19				
" 30			50. 32.00				
Dec 12			56. 60.75				
Dec 15			62. 133.50				
By 11			64. 134.00				
" 17			69. 16.50				
Apr 23			79. 75.50				
" 25			61. 6.00				
May 14			84. 205.50				
" 21			85. 32.00				
" 21			85. 150.00				
" 21			85. 131.44				
June 10			87. 112.50				
" 19			90. 63.00				
" 19			90. 143.20				
" 27			94. 131.67				
" 27			14. 2.00				
			912423			912423	



## Pay Roll

[illegible]

## Electric Plant

1915	June	27	3	Amesford	417	60592.47
24	Engines fuel	49.41	745.64			
	"  "  "	15	26.89			
25	Eng. fuel	17	1641.17			
26	"  "  "	14	83.64			
	"  "  "	14	1950.80			
30	"  "  "	14	9.62			
	"  "  "		23.86			
1	"  "  "	15	549.62			
7	"  "  "	16	65.79			
	"  "  "		15.29			
9	Eng. fuel	90	1176.10			
10	"  "  "		363.72			
21	"  "  "	16	567.44			
	"  "  "		53.06			
	"  "  "	17	26.67			
	"  "  "		3.11			
	"  "  "	27				
	"  "  "		7.95			
	"  "  "		166.80			
	"  "  "		69.13			
22	"  "  "	14	270.60			
	"  "  "	19	6.44			
	"  "  "		6.30			
	"  "  "		33.10			
	"  "  "		6.93			
24	"  "  "		14.29			
	"  "  "		59.40			
27	Eng. fuel	91	1176.94			
29	"  "  "	20	13.97			
	"  "  "		6.45			
	"  "  "		22.01			
7	"  "  "	21	1135.64			
	"  "  "		24.74			
10	Eng. fuel	94	2210.43			
12	"  "  "	95	510.02			
16	"  "  "	22	26.42			
	"  "  "		95			
18	"  "  "	22	560.01			
20	"  "  "	95	1335.22			
24	"  "  "		1042.74			
25	"  "  "	22	4.47			
	"  "  "	96	1496.54			
27	"  "  "	23	216.00			
	"  "  "		650			
			60592.47			

60592.47

## Electric Plant

1915	June	27	3	Amesford	417	60592.47
				"  "  "	22	8.44
				"  "  "	24	12.61
				"  "  "		291.00
				"  "  "		20.17
				"  "  "	25	30.71
				"  "  "		5.10
				"  "  "		69.96
				"  "  "		96.71
				"  "  "		15.45
July	1	Eng. fuel	97	1173.32		
	10	"  "  "	98	172.47		
		"  "  "	26	67.43		
		"  "  "		10.80		
		"  "  "		102.57		
		"  "  "		11.90		
		"  "  "		3.51		
		"  "  "		141.20		
	12	"  "  "		1221.37		
		"  "  "	27	2.50		
		"  "  "		150.44		
	22	"  "  "	24	2.44		
		"  "  "		3.36		
		"  "  "		2.1		
		"  "  "		66.57		
	28	"  "  "		122.70		
		"  "  "		2.63		
		"  "  "	29	37.60		
		"  "  "	97	963.70		
	25	"  "  "	29	2.50		
		"  "  "		36.00		
		"  "  "	30	56.43		
		"  "  "		39.07		
		"  "  "		21.67		
		"  "  "		46.41		
		"  "  "		26.30		
		"  "  "	31	2.50		
		"  "  "		106.01		
		"  "  "		144.96		
		"  "  "		246.00		
	29	"  "  "		173.00		
		"  "  "		16.40		
		"  "  "		97.20		
		"  "  "		24.60		
				6624.35		

6624.35

## Electric Plant

1912	29	3, Amis fold	417	621535	Aug 12	By bank	54	123080
1912	"	bank	51	2540	" 12	By bank	185	71033
	"	"	"	690	By 5	bank	54	10050
	"	"	32	551	By 2	Balance	419	696432
Aug	5	"	33	2162				
	"	"	"	765				
	"	"	"	5066				
	"	"	"	5265				
	"	"	"	2613				
	"	"	"	2945				
	"	"	"	401				
	9	By Amis	101	79734				
	11	By Amis	102	10762				
	20	By Amis	"	154225				
	21	bank	24	227				
	23	bank	25	600				
	"	"	"	115				
	"	"	"	650				
	"	"	"	246				
	25	By Amis	104	53795				
	26	bank	35	105				
	27	"	"	996				
	"	"	36	132				
	"	"	"	340				
	30	By Amis	105	194945				
Dec	"	bank	105	1701				
	"	bank	54	28758				
	"	"	"	155				
	"	"	"	1940				
	"	"	"	650				
	"	"	"	74				
	39	"	39	2917				
	40	By Amis	106	16063				
	41	bank	39	434				
	42	"	"	24510				
	"	"	40	146				
	"	"	"	2240				
	"	"	41	6352				
	"	"	"	134				
	"	"	"	5103				
	"	"	"	360				
	"	"	"	4522				
	"	"	"	390				
	43	By Amis	107	44716				
1913	2	bank	42	120753				
	"	"	"	712025				

## Electric Plant

1912	2	By Balance	418	5916132	1912	6	By Amis fold	420	7305474
1912	4	bank	42	1940		"	"	"	"
	"	"	"	769		"	"	"	"
	"	"	43	355		"	"	"	"
	"	"	"	540		"	"	"	"
	7	"	"	10200		"	"	"	"
	"	"	44	1334		"	"	"	"
	"	"	"	219		"	"	"	"
	"	"	"	2642		"	"	"	"
	"	"	"	21397		"	"	"	"
	"	"	"	20115		"	"	"	"
	"	"	"	8494		"	"	"	"
	"	"	45	5216		"	"	"	"
	"	"	"	3900		"	"	"	"
	"	"	"	10139		"	"	"	"
	"	"	"	26274		"	"	"	"
	"	"	"	670		"	"	"	"
	"	"	"	470		"	"	"	"
	"	By Amis	109	45501		"	"	"	"
	11	By Amis	110	54619		"	"	"	"
	21	bank	46	158		"	"	"	"
	"	"	47	6658		"	"	"	"
	"	"	"	200		"	"	"	"
	"	"	"	7004		"	"	"	"
	"	"	"	295		"	"	"	"
	"	"	"	4472		"	"	"	"
	"	"	48	105		"	"	"	"
	22	By Amis	111	46493		"	"	"	"
	24	bank	48	146		"	"	"	"
	27	"	49	13114		"	"	"	"
	"	"	"	461		"	"	"	"
	"	"	"	1999		"	"	"	"
Jan	1	By Amis	114	74474		"	"	"	"
	20	bank	50	767		"	"	"	"
	22	"	"	1762		"	"	"	"
	23	By Amis	114	40544		"	"	"	"
	24	bank	51	135		"	"	"	"
	"	"	"	1373		"	"	"	"
	29	"	52	744		"	"	"	"
Dec	5	"	53	7303104		"	"	"	"
	"	"	"	1451		"	"	"	"
	"	"	"	9401		"	"	"	"
	"	"	54	102		"	"	"	"
	6	"	"	1441		"	"	"	"
	"	"	"	208		"	"	"	"
	"	"	"	7305796		"	"	"	"
	"	"	"	7305796		"	"	"	"

## Electric Meters

1911 Jan	6	2, Candy feed	419 7305774	23	By day chow	1201	52
		band	55 401 180	11	Bascom	12 7955132	
			502501				
			56671				
			24631				
			47931				
	1	By day chow	116 421541				
	10	Chickens	114 10441				
			4570				
	12	band	56 6194				
			266724				
			222				
	15		57 2654				
			411101				
			1225				
			19401				
			45591				
	19		57 136				
	22		59 4001				
			2551				
			15221				
	23	By day chow	1201 46962				
	24	band	57 55152				
	25		60 4525				
	26		61 1931				
	27		1501				
	12	By day chow	124 516301				
	14	Chickens	11367				
	15	By day chow	125 2650491				
		band	62 3601				
	16		6491				
			45111				
			5191				
	21		63 43791				
			24501				
			199531				
			5511				
			64 20324				
	24	By day chow	126 449611				
		band	64 10341				
			761				
	28		65 24501				
			2144				
			56 7955132				
			7955132				

## Electric Meters

1911 Jan	1	2, Bascom	1207955132	11	By day chow	1204	75
	7	band	66 631101	12	Chickens	121 1151992	
			525126			122 152576	
			35	23	Bascom	423 468774	
	11		67 21946				
			180				
			182				
	16		69 355				
			790				
	11	By day chow	127 59253				
	13	Chickens	129 4143				
	21	band	69 130				
	24		70 1164				
	25		425				
			182				
			285				
			1274				
			71 1050				
			2704				
			51				
			2345				
			72 1250				
			283				
	24	By day chow	129 47263				
	14	band	70 111467				
	15		207				
	17		74 6520				
			147				
	19		27				
	20	By day chow	132 54563				
		Chickens	133 2155				
	23	By day chow	134 25325				
	26	band	75 695				
	27		44				
	31	22094	135 495				
	6	By day chow	136 62961				
	9	band	76 675				
			465				
	11	By day chow	137 444424				
	13	Chickens	139 14464				
	17	band	76 144				
	18		77 250				
			140				
	23		1250				
			425997				



## Electric Bonds

1925			1925		
Jan	to Am. Ind	423 1615.75	Jan 23	to Schenck & H	1554 879.64
9	Pay Bond	151 657.61	50	to Bond 22	1110044.75
10	"	77 772.1			
"	"	84 137.24			
"	"	11 4500.1			
"	"	11 321.1			
"	"	11 53.04			
"	"	14 234.00			
"	"	11 337.1			
"	"	11 11.67			
11	"	11 210.1			
10	"	11 11.57			
11	"	90 320.1			
"	Am. Ind	152 1610.6			
17	to Am. Ind	153 4150.5			
18	to Am. Ind	154 1137.57			
19	Bond	90 250.1			
"	"	11 25500.1			
"	"	11 2575.1			
"	"	11 605.1			
"	"	11 1419.1			
"	"	11 195.1			
"	"	91 3759.1			
"	"	11 12616.1			
"	"	11 322.1			
"	"	11 176.1			
"	"	11 35.1			
"	"	92 26450.1			
"	"	11 123.1			
"	"	11 2016.1			
"	"	11 122.1			
"	"	93 254.1			
"	"	11 6435.1			
23	to Am. Ind	144 356.25			
"	to Am. Ind	155 1351.1			
"	to Am. Ind	155 1316.24			
24	to Am. Ind	156 552.63			
25	Bond	93 5223.1			
19	"	15166.25			
		131066.46			

131066.46







## Steel Machinery

19	3	Barren	411	47103	41	22	g	Boy (due)	1074	1175
"	"	Barb	41	5721	27	27	g	Boy (due)	1107	5720
"	"	"	"	241	Aug	5	"	Boy (due)	1091	1745
"	"	"	"	514	"	11	"	Barb	464	10231
20	"	Boy (due)	107	1202430	"	21	"	Aluminum (due)	1104	2905
27	"	Aluminum (due)	1044	1607	"	22	"	Boy (due)	1114	124
Aug	2	Barb	422	1799	"	24	"	Aluminum	444	42650255
"	"	"	"	7620						
"	"	"	"	5765						
"	"	"	"	2169						
"	"	"	"	6157						
"	"	"	48	10495						
"	"	"	"	0242						
"	"	"	"	1060						
"	"	"	"	5474						
7	"	"	"	5795						
"	"	"	"	14040						
"	"	"	"	5400						
"	"	"	"	5105						
"	"	"	42	600						
"	"	"	"	225						
"	"	"	"	600						
"	"	"	44	204						
"	"	"	"	22657						
"	"	"	"	7406						
"	"	"	"	5259						
"	"	"	"	2042						
"	"	"	"	24246						
"	"	"	"	5250						
"	"	"	"	500						
"	"	"	45	1342						
"	"	"	46	124						
"	"	"	46	122						
"	"	Boy (due)	1091	292412						
"	"	Aluminum	1104	141467						
14	"	Barb	46	140						
21	"	"	"	392						
"	"	"	47	1500						
"	"	"	"	360						
"	"	"	"	1540						
"	"	"	42	150						
"	"	"	"	219						
22	"	Boy (due)	111	519645						
24	"	Barb	42	2730						
			42	975110						4295410

## Steel Machinery

20	27	2	Barren	412	47103	27	5	g	Barb	52	199	19
"	"	"	Barb	41	554	"	5	"	Boy (due)	116	199	62
"	"	"	"	"	50	"	10	"	Barren	444	44915	63
"	"	"	"	"	1500							
"	"	"	"	"	1300							
"	"	"	"	"	330							
"	"	"	"	"	3200							
"	"	"	"	49	364							
"	"	"	"	"	549							
27	"	"	"	42	1293							
27	"	"	"	1124	273325							
"	"	17	Aluminum	114	0404							
"	"	22	Barb	51	4160							
"	"	"	"	"	11450							
"	"	22	Boy (due)	114	227007							
"	"	24	Barb	51	360							
"	"	"	"	"	1200							
"	"	"	"	"	9559							
"	"	"	"	"	5819							
29	"	"	"	32	12546							
29	"	5	"	53	4624							
"	"	5	"	"	5619							
"	"	"	"	"	1307							
"	"	"	"	"	3360							
"	"	"	"	"	1320							
"	"	"	"	"	1504							
"	"	"	"	"	126							
"	"	"	"	"	2100							
"	"	"	"	"	753							
"	"	"	"	54	1000							
"	"	6	"	"	12604							
"	"	"	"	"	142							
"	"	"	"	"	1411							
"	"	"	"	"	9734							
"	"	"	"	"	4051							
"	"	"	"	"	3241							
"	"	"	"	55	10961							
"	"	"	"	"	1512							
"	"	"	"	"	225							
"	"	"	"	"	6513							
"	"	"	Boy (due)	116	2650							
"	"	"	Aluminum	117	2030							
"	"	10	Barb	114	51677							
"	"	"	"	"	63130							
"	"	"	"	44	1114							

## New Machinery

1900	10	2	Bacon	1144091503	1900	22	2	Bacon	1201	355
12	12	12	Bail	55	4501	14	14	Bail	61	413
				55	4501	15	15	Bacon	1251	7354
				55	1451	16	16	Bacon	1155	4504/642
					2231					
					7001					
					9541					
15				7	562941					
					13001					
					25361					
					165					
					151241					
					137091					
					19441					
					3361					
					270					
				54	11041					
16			Bacon	1191	756					
19			Bail	54	3501					
					2141					
					3461					
					4141					
					19441					
22				57	2501					
					1501					
					1131					
					625					
23			Bail	1201	3229061					
24			Bacon	121	210					
30			Bail	60	3072					
			Bail	121	2100					
1903			Bail	61	45061					
					129191					
					66451					
					103454					
12			Bail	1251	4015401					
14			Bacon	125	63542					
15			Bail		10741					
			Bail	62	25001					
16					142541					
					1024					
					11755					
					5257					
					210					
					4049455					

## New Machinery

1903	16	2	Bacon	11445041642	1903	21	2	Bacon	11445020129
21	21	21	Bail	63	21991				
					45001				
					32501				
					93951				
					212061				
					6411				
					20845				
24			Bail	126	42204151				
				24	104201				
					141071				
25					31261				
30					15754				
					4721				
				65	1201				
					21701				
					11621				
					34491				
					33441				
27				65	72365				
7					5534				
					52				
9					6225				
10				67	34146				
11					200				
					8000				
					800				
					5847				
					113				
					250				
					10274				
					9654				
				65	796				
					1295				
					16312				
13				69	9006				
					5847				
					20366				
					1590				
					114				
16					4141				
11			Bail	144	435874				
13			Bacon	129	52699				
21			Bail	69	529				
					4020129				

## Mile) Machinery

1903 May	21	By Amg fnd	1154422229	1903 May	21	By Amg fnd	1154422229
	24	band	70	24	band	70	7980
	25			25			340
							1476
							837
							345
			71				919
							3291
							4925
							410
							93
							1400
							100
							4772
							2100
			72				175
							300
							3402
							6465
							6300
	24	By Amg	1291422050				
	25	By Amg	130144515				
	27	band	72				362
May	12		73				4600
	14						11521
	15						3925
	16	By Amg	132130954				
	17	band	73				21950
							11200
			74				7454
							11165
							1044
							533
							6077
	19	band	132				240
	20	By Amg	133				460949
		band	133				136837
	23	By Amg					165457
	24	band	75				5054
	25						5320
	27						6702
							33320
	31	2250	135				5668
		band	135				440
							4966810

47646010

## Mile) Machinery

1903 April	1	By Amg	1154422229	1903 May	11	By Amg	1154422229
	3	band	76				
	9	band	76				163764
							534
	11	By Amg	134				249182
	13	band	139				23478
							15950
	15						347500
	17						12631
	18						77
							1500
	21						394
	23						66
							461
							3095
							1960
							100
							2565
							400
							304
							400
							840
							1107
							1300
							2750
							6200
							644
							1425
							400
							112
							230
							15693
							2422
							445
							424500
							25551
							29041
							302500
		By Amg	141				274534
	24	band	74				3000
	25						459
	27						10477
May	1						1023
		By Amg	141				25104
	11	band	74				561
							4904272

4904272

## New Machinery

1983	1983	1983	1983	1983	1983
May	11	30	May	11	30
	11	30		11	30
	12	30		12	30
	13	30		13	30
	14	30		14	30
	15	30		15	30
	16	30		16	30
	17	30		17	30
	18	30		18	30
	19	30		19	30
	20	30		20	30
	21	30		21	30
	22	30		22	30
	23	30		23	30
	24	30		24	30
	25	30		25	30
	26	30		26	30
	27	30		27	30
	28	30		28	30
	29	30		29	30
	30	30		30	30
	31	30		31	30
	32	30		32	30
	33	30		33	30
	34	30		34	30
	35	30		35	30
	36	30		36	30
	37	30		37	30
	38	30		38	30
	39	30		39	30
	40	30		40	30
	41	30		41	30
	42	30		42	30
	43	30		43	30
	44	30		44	30
	45	30		45	30
	46	30		46	30
	47	30		47	30
	48	30		48	30
	49	30		49	30
	50	30		50	30
	51	30		51	30
	52	30		52	30
	53	30		53	30
	54	30		54	30
	55	30		55	30
	56	30		56	30
	57	30		57	30
	58	30		58	30
	59	30		59	30
	60	30		60	30
	61	30		61	30
	62	30		62	30
	63	30		63	30
	64	30		64	30
	65	30		65	30
	66	30		66	30
	67	30		67	30
	68	30		68	30
	69	30		69	30
	70	30		70	30
	71	30		71	30
	72	30		72	30
	73	30		73	30
	74	30		74	30
	75	30		75	30
	76	30		76	30
	77	30		77	30
	78	30		78	30
	79	30		79	30
	80	30		80	30
	81	30		81	30
	82	30		82	30
	83	30		83	30
	84	30		84	30
	85	30		85	30
	86	30		86	30
	87	30		87	30
	88	30		88	30
	89	30		89	30
	90	30		90	30
	91	30		91	30
	92	30		92	30
	93	30		93	30
	94	30		94	30
	95	30		95	30
	96	30		96	30
	97	30		97	30
	98	30		98	30
	99	30		99	30
	100	30		100	30

## New Machinery

1983	1983	1983	1983	1983	1983
June	10	30	June	10	30
	11	30		11	30
	12	30		12	30
	13	30		13	30
	14	30		14	30
	15	30		15	30
	16	30		16	30
	17	30		17	30
	18	30		18	30
	19	30		19	30
	20	30		20	30
	21	30		21	30
	22	30		22	30
	23	30		23	30
	24	30		24	30
	25	30		25	30
	26	30		26	30
	27	30		27	30
	28	30		28	30
	29	30		29	30
	30	30		30	30
	31	30		31	30
	32	30		32	30
	33	30		33	30
	34	30		34	30
	35	30		35	30
	36	30		36	30
	37	30		37	30
	38	30		38	30
	39	30		39	30
	40	30		40	30
	41	30		41	30
	42	30		42	30
	43	30		43	30
	44	30		44	30
	45	30		45	30
	46	30		46	30
	47	30		47	30
	48	30		48	30
	49	30		49	30
	50	30		50	30
	51	30		51	30
	52	30		52	30
	53	30		53	30
	54	30		54	30
	55	30		55	30
	56	30		56	30
	57	30		57	30
	58	30		58	30
	59	30		59	30
	60	30		60	30
	61	30		61	30
	62	30		62	30
	63	30		63	30
	64	30		64	30
	65	30		65	30
	66	30		66	30
	67	30		67	30
	68	30		68	30
	69	30		69	30
	70	30		70	30
	71	30		71	30
	72	30		72	30
	73	30		73	30
	74	30		74	30
	75	30		75	30
	76	30		76	30
	77	30		77	30
	78	30		78	30
	79	30		79	30
	80	30		80	30
	81	30		81	30
	82	30		82	30
	83	30		83	30
	84	30		84	30
	85	30		85	30
	86	30		86	30
	87	30		87	30
	88	30		88	30
	89	30		89	30
	90	30		90	30
	91	30		91	30
	92	30		92	30
	93	30		93	30
	94	30		94	30
	95	30		95	30
	96	30		96	30
	97	30		97	30
	98	30		98	30
	99	30		99	30
	100	30		100	30

## Price Administration

Aug 25	To Balance	111,735.21	24 Aug 9	By Pay due	101,407.5
	Card	51,250.0			101,407.5
		100.00			101,407.5
29		13.42	20		107,461.2
		12.50	29	Card	41,355.5
		17.00	7	Balance	44,777.94
		47.5			
		1.53			
Aug 5		33,750,83			
		11.96			
		13.50			
		1.00			
		6.15			
		6.75			
9	By due	101,500.59			
11	From down	101,18.7			
21	Card	44,25			
23		29.00			
		24.00			
		4.50			
		5.5, 19.42			
		15.00			
		12.66			
25	By due	101,734.25			
26	Card	45,34			
27		35,600			
28	By due	101,754.25			
	Card	42,14.19			
		25.69			
		115.16			
		25			
10	From down	101,25.14			
16	Card	49,22			
19		500.00			
		225.00			
		105			
		2.60			
20	By due	107,725.51			
Aug 2	Card	42,761.86			
4		14.19			
		160.59			
		6.61			
		57.74			
		45.55			
7		777.45			

777.45

## Price Administration

Aug 7	To Balance	44,777.94	1 Aug 9	By due	109,180
	Card	43,250	22		111,215
		23.75	23	Card	44,499
		44,670	24	By due	112,186.5
		24.25	22	Card	50,580
		47.47		By due	114,950
		10.07	25	From down	114,169.15
		30	25	Balance	442,179.05
		13.00			
		1.02			
		45,46.00			
		7.20			
		3.20			
		46,2.75			
	By due	109,623.25			
11	From down	110,19.12			
16	Card	46,41.25			
		103.39			
18		3.24			
		6.60			
		56.20			
21		6.00			
		47,1.00			
		2.47			
		1.75			
		2.00			
		16.60			
		5.25			
		11.00			
		3.30			
12	By due	111,591.66			
24	Card	44,20.1			
		25.10			
27		49,2.20			
28	By due	112,962.42			
	Card	50,100.43			
		26.73			
22	By due	114,575.26			
24	Card	51,149.92			
		24.023			
		500.00			
		216.67			
		53,251.44			
25		20.1			
		115.04			

215.04







## Store Room

1902 Aug	5	3	Am. fed	277	49	191	1902 Aug	9	6	By the	101	25
			bad	53	9.50			11	1	By the	102	320.599
					58.17			50	1	By the	103	392.74
					4.45							
					36.50							
					33.69							
					35.69							
	9		By the	101	109.74							
	21		bad	54	13.41							
	23				29.5							
					9.50							
					7.50							
					2.50							
					2.53							
				35	11.25							
					33.24							
					7.25							
					13.73							
					7.25							
					6.03							
					4.41							
					13.05							
	25		By the	105	113.31							
	26		bad	35	20.69							
	27				27.2							
					70.45							
					9.40							
				36	5.44							
					6.25							
					3.90							
					5.64							
					5.77							
					4.65							
					52.00							
					1.59							
					6.50							
					6.42							
					7.00							
					41.00							
					29.07							
					3.54							
					90.79							
	30				71.32							
					6.50							
					34.64							

914.94

## Store Room

1902 Aug	50	3	Baromet	44	59	274	1902 Aug	10	3	Baromet	101	477.273
			bad	57	250.45	104		7	1	Baromet	102	720.474
					14.50							
					159.64							
					98.73							
					74.51							
					250.25							
					105.95	1						
					3.49							
					7.40							
	16			59	14.47							
	19				420.91							
					11.24							
					105.74							
				40	63.69							
					51.60							
					34.35							
					73							
					14.54							
					21.51							
					6.53							
					30.25							
					7.62							
					15.00							
					5.44							
					7.50							
					2.47							
				41	4.73							
					3.60							
					47.52							
					22.74							
					2.90							
					2.71							
					20.34							
					12.00							
					25.00							
					93.27							
					13.25							
					104.52							
					9.29							
					21.54							
					27.51							
				43	6.50							
				43	20.50							
					2.97							
					2.97							
					2.97							
					2.97							
					2.97							
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					2.97							
					2.97							
					2.97							

977.47

## Stone Island

1000 Cuts	23	Barrow	447	7204.794	1000 Cuts	23	Barrow	447	7204.794
		Bar	45	12525			Bar	45	12525
				157.17					157.17
				325					325
				946					946
				1371					1371
				913					913
			44	2261					2261
				145.54					145.54
				196.15					196.15
				721					721
				1863					1863
				1200					1200
				639					639
				39070					39070
				1375					1375
				4200					4200
				1934					1934
				50					50
			45	2212					2212
				8529					8529
				2932					2932
				3739					3739
				5313					5313
				5158					5158
				4150					4150
				11519					11519
				4590					4590
				7793					7793
				85069					85069
				1562					1562
				1127					1127
				694					694
				1069					1069
				694					694
				765					765
				390					390
				165					165
				691					691
				102					102
				144					144
				550					550
			46	919					919
				150					150
				935217					935217

## Stone Island

1000 Cuts	23	Barrow	447	7204.794	1000 Cuts	23	Barrow	447	7204.794
		Bar	45	12525			Bar	45	12525
				157.17					157.17
				325					325
				946					946
				1371					1371
				913					913
			44	2261					2261
				145.54					145.54
				196.15					196.15
				721					721
				1863					1863
				1200					1200
				639					639
				39070					39070
				1375					1375
				4200					4200
				1934					1934
				50					50
			45	2212					2212
				8529					8529
				2932					2932
				3739					3739
				5313					5313
				5158					5158
				4150					4150
				11519					11519
				4590					4590
				7793					7793
				85069					85069
				1562					1562
				1127					1127
				694					694
				1069					1069
				694					694
				765					765
				390					390
				165					165
				691					691
				102					102
				144					144
				550					550
			46	919					919
				150					150
				935217					935217

## Store Room

1922	1922
Aug 27 3 Bazaar	449 7162.63
" " " "	49. 1494
" " " "	90
" " " "	95.42
Aug 6 " " "	50 17712.75
" " " "	16080
" " " "	27459
" " " "	117.11
" " " "	6074
" " " "	112 9520
" " " "	50. 1416
" " " "	114. 6580
" " " "	51. 1444
" " " "	21.51
" " " "	16.85
" " " "	2.40
" " " "	52. 1270
Dec 5 " " "	53. 73739.1
" " " "	44.01
" " " "	69.19
" " " "	54164.1
" " " "	3.11
" " " "	706.1
" " " "	23.10.1
" " " "	2757
" " " "	1725.1
" " " "	250.1
" " " "	1505.1
" " " "	54. 247.1
" " " "	2549.1
" " " "	15.10.1
" " " "	770.1
" " " "	700.1
" " " "	340.1
" " " "	482.1
" " " "	2453.1
" " " "	1200.1
" " " "	1050.1
" " " "	4104.1
" " " "	63.1
" " " "	1106.1
" " " "	430.1
" " " "	375.1
" " " "	242.1
" " " "	920496

920496

## Store Room

1922	1922
Dec 6 3 Bazaar	450 920496
" " " "	54. 530.1
" " " "	55. 1492.1
" " " "	2500.1
" " " "	2140.1
" " " "	3597.1
" " " "	4200.1
" " " "	2294.1
" " " "	5655.1
" " " "	7467.1
" " " "	1760.1
" " " "	1277.1
" " " "	7725.1
" " " "	10630.1
" " " "	25293.1
" " " "	8265.1
" " " "	1926.1
" " " "	11. 7575.1
Dec 12 " " "	55. 2276.1
" " " "	56. 1200.1
" " " "	56. 670.1
" " " "	3347
" " " "	455.1
" " " "	394.1
" " " "	3770.1
" " " "	3204.1
" " " "	315.1
" " " "	5439.1
" " " "	165.1
" " " "	244.1
" " " "	2445.1
" " " "	57. 4440.1
" " " "	475.1
" " " "	474.1
" " " "	1053.1
" " " "	1223.1
" " " "	200.1
" " " "	1097.1
" " " "	240.1
" " " "	374.1
" " " "	1030.1
" " " "	526.1
" " " "	2325.1
" " " "	102.1
" " " "	1056253

1056253

## Stone Room

1902 Jan			1902 Jan				
15	2	Barrow	55	7	102.36	120	05
"	"	Barb	57	"	1395.00	120	40
"	"	"	"	"	324.62	12	"
17	"	"	"	"	75	14	Chambers
22	"	"	"	"	2522	21	Barrow
"	"	"	"	"	1660	"	"
"	"	"	"	"	79	"	"
"	"	"	"	"	261	"	"
"	"	"	"	"	470	"	"
"	"	"	"	"	795	"	"
"	"	"	"	"	623	"	"
"	"	"	"	"	1371	"	"
"	"	"	"	"	1464	"	"
"	"	"	"	"	1215	"	"
"	"	"	"	"	1210	"	"
"	"	"	"	"	975	"	"
"	"	"	"	"	296	"	"
"	"	"	"	"	450	"	"
"	"	"	"	"	125	"	"
"	"	"	"	"	50	"	"
"	"	"	"	"	1336	"	"
23	"	Bay View	120	"	10497	"	"
24	"	Barb	60	"	4009	"	"
"	"	"	"	"	244	"	"
30	"	"	"	"	244	"	"
1	"	"	"	"	99	"	"
2	"	"	"	"	150	"	"
12	"	Bay View	120	"	10222	"	"
16	"	Barb	62	"	23524	"	"
"	"	"	"	"	9444	"	"
"	"	"	"	"	2675	"	"
"	"	"	"	"	4129	"	"
"	"	"	"	"	504	"	"
"	"	"	"	"	33940	"	"
"	"	"	"	"	5064	"	"
"	"	"	"	"	252	"	"
"	"	"	"	"	4250	"	"
"	"	"	"	"	1700	"	"
"	"	"	"	"	3695	"	"
"	"	"	"	"	6003	"	"
"	"	"	"	"	2319	"	"
"	"	"	"	"	5297	"	"
"	"	"	"	"	7423	"	"
"	"	"	"	"	3622	"	"
"	"	"	"	"	2370	"	"
					952904		

952904

## Stone Room

1902 Jan			1902 Jan				
21	2	Barrow	55	7	102.36	120	05
"	"	Barb	57	"	1395.00	120	40
22	"	"	"	"	324.62	12	"
24	"	Bay View	120	"	10497	"	"
25	"	Barb	60	"	4009	"	"
30	"	"	"	"	244	"	"
"	"	"	"	"	244	"	"
"	"	"	"	"	99	"	"
"	"	"	"	"	150	"	"
"	"	"	"	"	10222	"	"
"	"	"	"	"	23524	"	"
"	"	"	"	"	9444	"	"
"	"	"	"	"	2675	"	"
"	"	"	"	"	4129	"	"
"	"	"	"	"	504	"	"
"	"	"	"	"	33940	"	"
"	"	"	"	"	5064	"	"
"	"	"	"	"	252	"	"
"	"	"	"	"	4250	"	"
"	"	"	"	"	1700	"	"
"	"	"	"	"	3695	"	"
"	"	"	"	"	6003	"	"
"	"	"	"	"	2319	"	"
"	"	"	"	"	5297	"	"
"	"	"	"	"	7423	"	"
"	"	"	"	"	3622	"	"
"	"	"	"	"	2370	"	"
					952904		

247

952904

76047

Steve Korman

201 207	11	27	Army field	185	4760 47	1902 47	13	Of	Charters	129	412 49	79
			Bank	64	219 16		15		Balance	155	4763	74
					91 16							
					103 50							
					27 50							
					135 91							
					104 17							
					13 15							
					44 90							
	13			69	54 66							
	16				117 5							
					11 05							
	11		Pay (Cash)	104	458 45							
	21		Bank	70	37 45							
					22 47							
	25				11 30							
					240							
					20 40							
					11 09							
					57 5							
					190							
					540							
				71	122 0							
					16 20							
					165							
					290							
					74							
					569							
					750							
					849							
					17 00							
					570							
					570							
					430							
					125							
				72	540							
					10 60							
					414							
					750							
					260							
					14 40							
					626							
					914							
					0 00							
					100 293							
					100 12 92							

Steve Brown

1903	25	3	Bale	114	1763	194	1903	25	3	of	Landre	134	2052	60
1904	24		Bay Area	149	101	75	1904	24				139	751	17
1905	12		Bay Area	151	1579	12	1905	12				158	5793	37
1906	14		Land	73		574	1906	14						
1907	17					63.00	1907	17						
1908						119.34	1908							
1909						67.60	1909							
1910						42.29	1910							
1911						74.60	1911							
1912						42.45	1912							
1913						120.62	1913							
1914						101	1914							
1915						210.22	1915							
1916						26.05	1916							
1917						3.04	1917							
1918	20		Bay Area	152	106	60	1918	20						
1919	23			134	74	4	1919	23						
1920	24		Land	75		12.45	1920	24						
1921	27					20.29	1921	27						
1922	31		119.1.14			29.54	1922	31						
1923	34		119.1.14			29.54	1923	34						
1924	41		Bay Area	137	115	53.51	1924	41						
1925	9		Land	76		2.66	1925	9						
1926	11					6.29	1926	11						
1927	17		Bay Area	134	64	51	1927	17						
1928	17		Land	76		43.26	1928	17						
1929	18					77	1929	18						
1930	23					57.44	1930	23						
1931						7.29	1931							
1932						1.11	1932							
1933						74	1933							
1934						57.4	1934							
1935						15.94	1935							
1936						52.13	1936							
1937						2.00	1937							
1938						12.62	1938							
1939						11.44	1939							
1940						12.13	1940							
1941						3.25	1941							
1942						14.20	1942							
1943						9.65	1943							
1944						1.43	1944							
1945						35.37	1945							
1946						23.66	1946							
1947						5.44	1947							
1948						2.40	1948							
1949						12677.54	1949							
1950							1950							



Steve Koon

1923	June	18	27	Bar	157	1257	52	11	1916	15
				Land	19	2104	1	27	1916	15
						722				
						619				
						1472				
						601				
						630				
						242				
						1582				
						1845				
						1640				
						190				
7				off. 28th	153	1066				
19				Land	90	545				
						542				
						400				
						750				
						434				
					91	4935				
						2514				
						650				
						795				
						191				
						7950				
						161				
						510				
						5119				
						270				
						7212				
						5200				
						1400				
						600				
						2573				
					92	506				
						170				
						5472				
						2320				
						2541				
						1217				
					95	2366				
43				Exam 24th	100	3100				
44				By 2nd	100	7025				
45				Land	95	1066				
27						1942				
						1362009				

## Stone Room

1983 June	1983 June 10	1983 June 12	1983 June 14
27 In Buevian " " bank. " " F. S. O. p. d. 2	17 12603 25 934 160 17 12603 25 12603 25	17 12603 25 934 160 17 12603 25 12603 25	17 12603 25 934 160 17 12603 25 12603 25





## Steam Plants

1904 Feb	16	3, Army field	1079934412	1904 Mar	23	3, Army field	107906977	1904 Apr	23	3, Army field	107906977
		Barb	69 13.04								
	11	Bay Area	124 574.93								
	13	Shut down	129 160.07								
	21	Barb	69 91.70								
	24		70 19.50								
	25		72 4.50								
			74 4								
			72 0								
			104								
			35.50								
	24	Bay Area	129 552.95								
	27	Barb	72 375.00								
			42.5								
May	14		91792.12								
	15		73 307.32								
	15		12.19								
	14		8113.25								
	16	Shut down	134 2753.04								
	17	Barb	73 6417								
			242								
			290								
			67.93								
			74 62.00								
			142								
			144								
			212.42								
	20	Bay Area	132 830.45								
		Shut down	133 155.79								
		Bay Area	541.75								
	20	Barb	75 19.34								
	27		242								
	31	Shut down	135 1247								
Apr	9	Barb	76 1312.04								
			49.02								
			540								
	11	Bay Area	144 561.44								
	13	Shut down	139 7269								
		Barb	76 617.50								
	17		52								
	14		77 106.00								
			600								
			400								
	23		74 250								
			341								
			51.27								
			206977.50								

106977.50

## Steam Plants

1904 Apr	23	3, Army field	107906977	1904 May	7	3, Barb	107906977	1904 Jun	5	3, Barb	107906977
		Barb	74 24.50								
			79 33.66								
			4.00								
			9.03								
			20.5								
			50								
			10.97								
			9.62								
			2.10								
			2.00								
			209.73								
		Bay Area	141 442.40								
		Barb	84 12.00								
			2.5								
			1277.20								
		Bay Area	142 404.00								
		Barb	72 2.5								
			33.77								
			90								
			66								
			12.22								
		Shut down	145 44.2								
		Barb	73 40.09								
			18.36								
			10.30								
			1.60								
			3.15								
			5.31								
			12.77								
			3.45								
			79.24								
		Shut down	145 720								
		Barb	74 72								
			2.5								
			79.2								
		Bay Area	147 53.73								
		Barb	77 79.24								
			161								
		Shut down	149 556.51								
		Shut down	150 797.13								
		Bay Area	151 457.13								
		Shut down	152 507.40								
		Shut down	152 153.66								
			133.67								

133637.13

Coast Plants

1952	2	2	Land	42	233.65	1951	21	of SA Brown	133	660
1953	15		Religion	125	135.29	1952	38	of SA F.L.	210	362.17
1954					362.97					362.97

## *Stem Plants*

1903	Jan		1903	Jan		1903	Jan
9	10	Barb	17	151	20	107	107
			14	244	20	1159	1159
			14	674	20	1159	1159
			14	801	20	1159	1159
			14	244	20	1159	1159
			14	674	20	1159	1159
			14	801	20	1159	1159
			14	244	20	1159	1159
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			14	244	20	1159	1159
			14	674	20	1159	1159
			14	801	20	1159	1159

## Civ System

1902	2	Land	425	60.01	1903	25	Land	1301	445.15
1904	21	Land	1101	63.54					
1905	5	Land	59	50.58					
				445.15					445.15

## Misc Admonitions

1903	14	2	Land	445.42	5.54	1903	25	Land	1301	445.15
				145	71					
				167	72					
				145	71					
				6.03						
				51						
				113	33					
				14	65					
				17	90					
				17	35					
				160						
				149	50					
				150	72					
				11	08					
				163	44					
				151	10					
				17	40					
				165						
				320						
				305						
				49	413					
				240						
				400						
				2700						
				75						
				50						
				59	77					
				90	74					
				152	47					
				153	133					
				90	103					
				270						
				77	51					
				127	51					
				435						
				910	102					
				74						
				69	00					
				675						
				500						
				92	400					
				225						
				416						
				200						
				950	100					

Office Administration

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206



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*PART IV*  
*(1899-1910)*

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Gregory Jankunis  
David W. Hutchings  
Leslie Fields

Theresa M. Collins  
Gregory Field  
Aldo E. Salerno  
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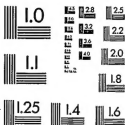
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